

### 1 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (5x - 6) \times (6x + 5) \\ B &= (x + 2)^2 \end{aligned}$$

$$\begin{aligned} C &= (3x - 4)^2 \\ D &= (3x - 6) \times (3x + 6) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{5}{7}x - 10\right) \times \left(\frac{5}{7}x + 10\right) \\ F &= -(10x + 7) \times (7x - 10) \end{aligned}$$

### 2 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (4x - 2)^2 \\ B &= (4x + 1) \times (4x - 1) \end{aligned}$$

$$\begin{aligned} C &= (x + 8)^2 \\ D &= (2x - 9) \times (9x + 2) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{8}{7}x - \frac{3}{8}\right)^2 \\ F &= -(7x - 9) \times (9x + 7) \end{aligned}$$

### 3 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (x + 6) \times (x - 6) \\ B &= (2x + 4)^2 \end{aligned}$$

$$\begin{aligned} C &= (10x - 10)^2 \\ D &= (3x + 9) \times (9x - 3) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{5}{3}x - \frac{1}{3}\right) \times \left(\frac{1}{3}x + \frac{5}{3}\right) \\ F &= -(2x + 5) \times (2x - 5) \end{aligned}$$

### 4 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (3x - 1)^2 \\ B &= (8x - 2) \times (8x + 2) \end{aligned}$$

$$\begin{aligned} C &= (9x + 5)^2 \\ D &= (9x + 4) \times (4x - 9) \end{aligned}$$

$$\begin{aligned} E &= -(7x + 1) \times (7x - 1) \\ F &= \left(\frac{8}{5}x + 6\right) \times \left(6x - \frac{8}{5}\right) \end{aligned}$$

### 5 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (10x - 8)^2 \\ B &= (3x - 9) \times (3x + 9) \\ C &= (5x + 7)^2 \end{aligned}$$

$$\begin{aligned} D &= (5x - 10) \times (10x + 5) \\ E &= \left(x + \frac{7}{2}\right)^2 \end{aligned}$$

$$F = -(9x - 10)^2$$

### 6 7 7

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (6x - 8) \times (6x + 8) \\ B &= (9x - 10)^2 \end{aligned}$$

$$\begin{aligned} C &= (9x - 7) \times (7x + 9) \\ D &= (5x + 6)^2 \end{aligned}$$

$$\begin{aligned} E &= -(5x - 10) \times (10x + 5) \\ F &= \left(\frac{7}{8}x - 4\right)^2 \end{aligned}$$

### 7 7 7

انشر العبارات الحرفية التالية :

$$A = (2x - 5)^2$$

$$B = (9x + 10) \times (10x - 9)$$

$$C = (9x + 6)^2$$

$$D = (2x - 3) \times (2x + 3)$$

$$E = -(8x + 5) \times (5x - 8)$$

$$F = \left(\frac{8}{3}x - \frac{8}{9}\right)^2$$

8 7 λ

انشر العبارات الحرفية التالية :

$$A = (7x - 6)^2$$

$$B = (10x - 8) \times (10x + 8)$$

$$C = (6x + 6)^2$$

$$D = (5x + 6) \times (6x - 5)$$

$$E = \left(\frac{8}{7}x - \frac{2}{5}\right) \times \left(\frac{2}{5}x + \frac{8}{7}\right)$$

$$F = -(4x - 5) \times (4x + 5)$$

9 7 λ

انشر العبارات الحرفية التالية :

$$A = (2x + 2) \times (2x - 2)$$

$$B = (6x - 3) \times (3x + 6)$$

$$C = (10x + 1)^2$$

$$D = (10x - 5)^2$$

$$E = \left(\frac{3}{7}x - \frac{7}{3}\right) \times \left(\frac{7}{3}x + \frac{3}{7}\right)$$

$$F = -(9x + 2) \times (9x - 2)$$

10 7 λ

انشر العبارات الحرفية التالية :

$$A = (9x + 4) \times (9x - 4)$$

$$B = (3x + 4) \times (4x - 3)$$

$$C = (4x + 1)^2$$

$$D = (5x - 5)^2$$

$$E = \left(\frac{1}{3}x - \frac{7}{6}\right) \times \left(\frac{1}{3}x + \frac{7}{6}\right)$$

$$F = -(5x - 2) \times (2x + 5)$$

11 7 λ

انشر العبارات الحرفية التالية :

$$A = (9x - 7)^2$$

$$B = (2x + 9) \times (2x - 9)$$

$$C = (10x + 2)^2$$

$$D = (10x - 10) \times (10x + 10)$$

$$E = -(4x + 3)^2$$

$$F = \left(\frac{10}{3}x - 2\right) \times \left(\frac{10}{3}x + 2\right)$$

12 7 λ

انشر العبارات الحرفية التالية :

$$A = (8x + 7) \times (7x - 8)$$

$$B = (6x + 4)^2$$

$$C = (8x - 1) \times (8x + 1)$$

$$D = (5x - 6)^2$$

$$E = \left(\frac{1}{2}x + 5\right) \times \left(5x - \frac{1}{2}\right)$$

$$F = -(3x + 3)^2$$

13 7 λ

انشر العبارات الحرفية التالية :

$$A = (2x + 1) \times (x - 2)$$

$$B = (7x - 2)^2$$

$$C = (x + 2)^2$$

$$D = (10x + 1) \times (10x - 1)$$

$$E = -(9x - 1)^2$$

$$F = \left(\frac{3}{4}x + \frac{7}{10}\right) \times \left(\frac{7}{10}x - \frac{3}{4}\right)$$

14 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (10x - 8)^2 \\ B &= (9x - 2) \times (2x + 9) \end{aligned}$$

$$\begin{aligned} C &= (8x - 8) \times (8x + 8) \\ D &= (6x + 7)^2 \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{7}{2}x - \frac{7}{8}\right) \times \left(\frac{7}{8}x + \frac{7}{2}\right) \\ F &= -(5x - 9) \times (5x + 9) \end{aligned}$$

15 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (4x + 7) \times (4x - 7) \\ B &= (3x + 1)^2 \end{aligned}$$

$$\begin{aligned} C &= (7x - 7) \times (7x + 7) \\ D &= (8x - 5)^2 \end{aligned}$$

$$\begin{aligned} E &= -(2x - 9)^2 \\ F &= \left(\frac{10}{9}x + \frac{8}{7}\right) \times \left(\frac{8}{7}x - \frac{10}{9}\right) \end{aligned}$$

16 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (8x - 9)^2 \\ B &= (4x - 9) \times (9x + 4) \end{aligned}$$

$$\begin{aligned} C &= (4x + 8)^2 \\ D &= (6x - 10) \times (6x + 10) \end{aligned}$$

$$\begin{aligned} E &= -(2x + 4)^2 \\ F &= \left(\frac{1}{8}x - \frac{9}{5}\right)^2 \end{aligned}$$

17 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (5x - 7)^2 \\ B &= (10x - 7) \times (10x + 7) \end{aligned}$$

$$\begin{aligned} C &= (8x + 7)^2 \\ D &= (4x - 9) \times (9x + 4) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{5}{8}x + \frac{5}{8}\right) \times \left(\frac{5}{8}x - \frac{5}{8}\right) \\ F &= -(2x - 5) \times (5x + 2) \end{aligned}$$

18 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (10x - 9)^2 \\ B &= (8x + 10) \times (10x - 8) \end{aligned}$$

$$\begin{aligned} C &= (2x + 3)^2 \\ D &= (x - 9) \times (x + 9) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{3}{2}x - \frac{7}{4}\right)^2 \\ F &= -(8x - 4) \times (4x + 8) \end{aligned}$$

19 ٧ ٧

انشر العبارات الحرفية التالية :

$$\begin{aligned} A &= (7x - 10)^2 \\ B &= (5x + 3)^2 \end{aligned}$$

$$\begin{aligned} C &= (8x - 2) \times (8x + 2) \\ D &= (8x - 6) \times (6x + 8) \end{aligned}$$

$$\begin{aligned} E &= \left(\frac{5}{6}x + \frac{1}{9}\right)^2 \\ F &= -(6x - 2) \times (6x + 2) \end{aligned}$$

1 7 λ

حلّ العبارات الحرفية التالية :

$$A = (x - 1) \times (4x + 6) + (4x + 6) \times (5x + 6)$$

$$B = -16x^2 + 49$$

$$C = -49 + (8x - 1)^2$$

$$D = 64x^2 - 64x + 16$$

$$E = (2x - 3)^2 + (2x - 3) \times (-6x + 5)$$

$$F = -(10x + 9) + (10x + 9) \times (10x + 5)$$

2 7 λ

حلّ العبارات الحرفية التالية :

$$A = -36x^2 + 16$$

$$B = 16x^2 + 16x + 4$$

$$C = (-x + 1) \times (6x + 2) + (3x - 9) \times (6x + 2)$$

$$D = -(6x - 9)^2 + 81x^2$$

$$E = (-3x - 3)^2 + (3x + 9) \times (-3x - 3)$$

$$F = 6x + 3 - (6x + 3) \times (8x + 5)$$

3 7 λ

حلّ العبارات الحرفية التالية :

$$A = 25x^2 - 10x + 1$$

$$B = -9x^2 + 9$$

$$C = (-4x + 9)^2 - 4$$

$$D = (-5x - 7) \times (-10x + 7) - (-5x - 7) \times (3x + 2)$$

$$E = (7x + 2) \times (8x + 5) + 7x + 2$$

$$F = (-2x + 6)^2 + (7x - 5) \times (-2x + 6)$$

4 7 λ

حلّ العبارات الحرفية التالية :

$$A = 81x^2 + 180x + 100$$

$$B = -(8x + 7) \times (x - 6) + (x - 6) \times (9x + 6)$$

$$C = 25x^2 - 49$$

$$D = (-8x + 2)^2 - 100$$

$$E = (-7x + 7) \times (3x - 3) + (3x - 3)^2$$

$$F = 5x + 9 + (2x + 10) \times (5x + 9)$$

5 7 λ

حلّ العبارات الحرفية التالية :

$$A = 100x^2 + 140x + 49$$

$$B = -49x^2 + 49$$

$$C = (4x + 3) \times (3x - 9) + (4x + 3) \times (5x + 9)$$

$$D = 81 - (5x + 8)^2$$

$$E = 2x + 1 + (4x - 2) \times (2x + 1)$$

$$F = (5x + 4)^2 - (9x + 6) \times (5x + 4)$$

6 7 λ

حلّ العبارات الحرفية التالية :

$$A = 16x^2 - 8x + 1$$

$$B = -(x - 6)^2 + 49x^2$$

$$C = -x^2 + 36$$

$$D = (3x + 4) \times (10x + 2) - (3x + 4) \times (-3x + 10)$$

$$E = (5x - 2) \times (7x + 3) + (5x - 2)^2$$

$$F = 7x + 4 + (7x + 4) \times (2x + 2)$$

7 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= 36x^2 + 12x + 1 \\ B &= -49x^2 + 64 \\ C &= (5x + 2) \times (x - 3) - (x - 3) \times (-10x + 6) \end{aligned}$$

$$\begin{aligned} D &= -(3x + 8)^2 + 25 \\ E &= (2x - 4) \times (4x + 6) + (4x + 6)^2 \\ F &= (9x - 7) \times (10x + 2) + 9x - 7 \end{aligned}$$

8 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= -81 + (7x + 6)^2 \\ B &= 9x^2 - 9 \\ C &= -(6x + 4) \times (6x + 9) + (6x + 4) \times (2x + 2) \end{aligned}$$

$$\begin{aligned} D &= 9x^2 - 48x + 64 \\ E &= (2x - 6) \times (3x + 9) + 3x + 9 \\ F &= (-7x + 9) \times (8x + 2) + (8x + 2)^2 \end{aligned}$$

9 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= 4x^2 - 28x + 49 \\ B &= 16x^2 - (-7x + 6)^2 \\ C &= 25x^2 - 100 \end{aligned}$$

$$\begin{aligned} D &= -(4x - 8) \times (6x + 10) + (6x + 9) \times (4x - 8) \\ E &= (6x - 9)^2 + (6x - 9) \times (4x - 6) \\ F &= (7x + 5) \times (7x + 10) + 7x + 10 \end{aligned}$$

10 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= (9x - 9)^2 - 64 \\ B &= (6x + 1) \times (-6x + 9) + (6x + 1) \times (3x + 3) \\ C &= 9x^2 + 30x + 25 \end{aligned}$$

$$\begin{aligned} D &= -4x^2 + 49 \\ E &= (x + 3) \times (5x + 9) + (5x + 9)^2 \\ F &= (8x + 2) \times (7x - 4) - (7x - 4) \end{aligned}$$

11 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= (6x - 2)^2 - 100x^2 \\ B &= 81x^2 - 100 \\ C &= (6x - 2) \times (-x + 7) + (6x - 2) \times (2x + 7) \end{aligned}$$

$$\begin{aligned} D &= 81x^2 - 162x + 81 \\ E &= (6x + 7) \times (-8x - 3) + (-8x - 3)^2 \\ F &= (x + 4) \times (4x + 3) - (x + 4) \end{aligned}$$

12 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= -4x^2 + 100 \\ B &= 9 - (6x + 2)^2 \\ C &= 25x^2 + 20x + 4 \end{aligned}$$

$$\begin{aligned} D &= (4x + 2) \times (-10x + 2) + (x + 3) \times (-10x + 2) \\ E &= (6x + 9)^2 + (6x + 9) \times (-10x - 5) \\ F &= -(8x + 4) + (x + 2) \times (8x + 4) \end{aligned}$$

13 7 λ

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= -49x^2 + 16 \\ B &= -(-7x + 4) \times (9x - 1) + (5x + 2) \times (9x - 1) \\ C &= 36x^2 - 120x + 100 \end{aligned}$$

$$\begin{aligned} D &= (-3x + 6)^2 - 81x^2 \\ E &= (-x + 7) \times (8x + 6) + (-x + 7)^2 \\ F &= (8x - 4) \times (7x - 7) + 8x - 4 \end{aligned}$$

14 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= (3x - 10)^2 - 1 \\ B &= -16x^2 + 1 \\ C &= (10x + 3) \times (x + 9) + (3x - 5) \times (10x + 3) \end{aligned}$$

$$\begin{aligned} D &= x^2 + 20x + 100 \\ E &= -(x + 8) \times (6x + 1) + (6x + 1)^2 \\ F &= 3x - 3 + (3x - 3) \times (4x + 9) \end{aligned}$$

15 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= x^2 + 14x + 49 \\ B &= -25x^2 + 4 \\ C &= -(-10x + 5)^2 + 4x^2 \end{aligned}$$

$$\begin{aligned} D &= (-9x + 5) \times (9x - 1) + (9x - 1) \times (-2x + 3) \\ E &= 2x + 9 + (2x + 9) \times (2x + 7) \\ F &= (9x + 2) \times (9x + 10) - (9x + 10)^2 \end{aligned}$$

16 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= -16 + (-2x - 10)^2 \\ B &= 81x^2 - 90x + 25 \\ C &= (9x + 4) \times (4x - 3) + (2x - 8) \times (4x - 3) \end{aligned}$$

$$\begin{aligned} D &= -16x^2 + 81 \\ E &= -(5x + 5)^2 + (5x + 5) \times (-9x + 4) \\ F &= 5x + 3 + (5x + 3) \times (4x - 6) \end{aligned}$$

17 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= (2x - 10) \times (7x - 5) + (4x - 2) \times (7x - 5) \\ B &= (x + 7)^2 - 64 \\ C &= -81x^2 + 1 \end{aligned}$$

$$\begin{aligned} D &= 81x^2 + 126x + 49 \\ E &= -(8x + 3) \times (3x + 10) + 8x + 3 \\ F &= (x + 3) \times (4x - 6) + (x + 3)^2 \end{aligned}$$

18 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= -49x^2 + 4 \\ B &= 81x^2 + 72x + 16 \\ C &= -(-8x + 6)^2 + 100 \end{aligned}$$

$$\begin{aligned} D &= (9x - 4) \times (5x - 4) + (5x - 4) \times (7x + 3) \\ E &= (7x + 6)^2 - (7x + 9) \times (7x + 6) \\ F &= (10x - 1) \times (6x + 10) + 6x + 10 \end{aligned}$$

19 7 7

حلّل العبارات الحرفية التالية :

$$\begin{aligned} A &= 25x^2 - 20x + 4 \\ B &= 100x^2 - (x+2)^2 \\ C &= (-6x-4) \times (5x+10) + (-8x-9) \times (-6x-4) \end{aligned}$$

$$\begin{aligned} D &= 100x^2 - 4 \\ E &= (-7x+3) \times (10x-9) + (-7x+3)^2 \\ F &= 2x+2 - (2x+2) \times (8x+4) \end{aligned}$$

20 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= 36x^2 + 84x + 49 \\ B &= 81x^2 - 64 \\ C &= -(x+10) \times (6x+3) + (x+10) \times (7x+3) \end{aligned}$$

$$\begin{aligned} D &= 1 - (3x+4)^2 \\ E &= (6x+3) \times (10x+6) + (10x+6)^2 \\ F &= (4x+10) \times (6x-7) + 4x+10 \end{aligned}$$

21 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= 64x^2 - (-2x-7)^2 \\ B &= 64x^2 - 48x + 9 \\ C &= (9x+8) \times (10x-2) - (9x+8) \times (2x+7) \end{aligned}$$

$$\begin{aligned} D &= -16x^2 + 4 \\ E &= (2x-7) \times (7x-5) + (7x-5)^2 \\ F &= (4x-4) \times (10x+9) + 10x+9 \end{aligned}$$

22 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= -64x^2 + 64 \\ B &= (4x+2) \times (8x+1) - (9x+9) \times (8x+1) \\ C &= 36x^2 - (7x+10)^2 \end{aligned}$$

$$\begin{aligned} D &= 100x^2 + 60x + 9 \\ E &= 3x+6 + (3x+6) \times (9x+8) \\ F &= (2x-3)^2 + (-9x+9) \times (2x-3) \end{aligned}$$

23 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= 25x^2 - 81 \\ B &= (3x+3) \times (7x+9) - (7x+9) \times (2x+9) \\ C &= (-5x+10)^2 - 64x^2 \end{aligned}$$

$$\begin{aligned} D &= 64x^2 - 80x + 25 \\ E &= (5x+1) \times (5x+4) + (5x+4)^2 \\ F &= (2x+1) \times (4x+1) + 4x+1 \end{aligned}$$

24 7 λ

حلّ العبارات الحرفية التالية :

$$\begin{aligned} A &= 16x^2 - 81 \\ B &= (5x+3) \times (-7x+10) + (-7x+10) \times (9x+1) \\ C &= (2x-8)^2 - 16 \end{aligned}$$

$$\begin{aligned} D &= 25x^2 + 20x + 4 \\ E &= -(9x+9) \times (4x+1) + 4x+1 \\ F &= (5x+10)^2 + (x+2) \times (5x+10) \end{aligned}$$

# الحلول

موقع الأستاذ بلحوسين لرياضيات التعليم المتوسط

<https://prof27math.weebly.com/>

انشر العبارات الحرفية التالية :

$$A = (5x - 6) \times (6x + 5)$$

$$A = 5x \times 6x + 5x \times 5 - 6 \times 6x - 6 \times 5$$

$$A = 30x^2 + 25x - 36x - 30$$

$$A = 30x^2 + (25 - 36)x - 30$$

$$A = 30x^2 - 11x - 30$$

$$B = (x + 2)^2$$

$$B = x^2 + 2 \times x \times 2 + 2^2$$

$$B = x^2 + 4x + 4$$

$$C = (3x - 4)^2$$

$$C = (3x)^2 - 2 \times 3x \times 4 + 4^2$$

$$C = 9x^2 - 24x + 16$$

$$D = (3x - 6) \times (3x + 6)$$

$$D = (3x)^2 - 6^2$$

$$D = 9x^2 - 36$$

$$E = \left(\frac{5}{7}x - 10\right) \times \left(\frac{5}{7}x + 10\right)$$

$$E = \left(\frac{5}{7}x\right)^2 - 10^2$$

$$E = \frac{25}{49}x^2 - 100$$

$$F = -(10x + 7) \times (7x - 10)$$

$$F = -(10x \times 7x + 10x \times (-10) + 7 \times 7x + 7 \times (-10))$$

$$F = -(70x^2 - 100x + 49x - 70)$$

$$F = -(70x^2 + (-100 + 49)x - 70)$$

$$F = -(70x^2 - 51x - 70)$$

$$F = -70x^2 + 51x + 70$$

انشر العبارات الحرفية التالية :

$$A = (4x - 2)^2$$

$$A = (4x)^2 - 2 \times 4x \times 2 + 2^2$$

$$A = 16x^2 - 16x + 4$$

$$B = (4x + 1) \times (4x - 1)$$

$$B = (4x)^2 - 1^2$$

$$B = 16x^2 - 1$$

$$C = (x + 8)^2$$

$$C = x^2 + 2 \times x \times 8 + 8^2$$

$$C = x^2 + 16x + 64$$

$$D = (2x - 9) \times (9x + 2)$$

$$D = 2x \times 9x + 2x \times 2 - 9 \times 9x - 9 \times 2$$

$$D = 18x^2 + 4x - 81x - 18$$

$$D = 18x^2 + (4 - 81)x - 18$$

$$D = 18x^2 - 77x - 18$$

$$E = \left(\frac{8}{7}x - \frac{3}{8}\right)^2$$

$$E = \left(\frac{8}{7}x\right)^2 + 2 \times \frac{8}{7}x \times \frac{3}{8} + \left(\frac{3}{8}\right)^2$$

$$E = \frac{64}{49}x^2 + \frac{6 \times 8}{7 \times 8}x + \frac{9}{64}$$

$$E = \frac{64}{49}x^2 + \frac{6}{7}x + \frac{9}{64}$$

$$F = -(7x - 9) \times (9x + 7)$$

$$F = -(7x \times 9x + 7x \times 7 - 9 \times 9x - 9 \times 7)$$

$$F = -(63x^2 + 49x - 81x - 63)$$

$$F = -(63x^2 + (49 - 81)x - 63)$$

$$F = -(63x^2 - 32x - 63)$$

$$F = -63x^2 + 32x + 63$$

انشر العبارات الحرفية التالية :

$$A = (x + 6) \times (x - 6)$$

$$A = x^2 - 6^2$$

$$A = x^2 - 36$$

$$B = (2x + 4)^2$$

$$B = (2x)^2 + 2 \times 2x \times 4 + 4^2$$

$$B = 4x^2 + 16x + 16$$

$$C = (10x - 10)^2$$

$$C = (10x)^2 - 2 \times 10x \times 10 + 10^2$$

$$C = 100x^2 - 200x + 100$$

$$D = (3x + 9) \times (9x - 3)$$

$$D = 3x \times 9x + 3x \times (-3) + 9 \times 9x + 9 \times (-3)$$

$$D = 27x^2 - 9x + 81x - 27$$

$$D = 27x^2 + (-9 + 81)x - 27$$

$$D = 27x^2 + 72x - 27$$

$$E = \left(\frac{5}{3}x - \frac{1}{3}\right) \times \left(\frac{1}{3}x + \frac{5}{3}\right)$$

$$E = \frac{5}{3}x \times \frac{1}{3}x + \frac{5}{3}x \times \frac{5}{3} - \frac{1}{3} \times \frac{1}{3}x - \frac{1}{3} \times \frac{5}{3}$$

$$E = \frac{5}{9}x^2 + \frac{25}{9}x - \frac{1}{9}x - \frac{5}{9}$$

$$E = \frac{5}{9}x^2 + \left(\frac{25}{9} - \frac{1}{9}\right)x - \frac{5}{9}$$

$$E = \frac{5}{9}x^2 + \frac{24}{9}x - \frac{5}{9}$$

$$E = \frac{5}{9}x^2 + \frac{8 \times 3}{3 \times 3}x - \frac{5}{9}$$

$$E = \frac{5}{9}x^2 + \frac{8}{3}x - \frac{5}{9}$$

$$F = -(2x + 5) \times (2x - 5)$$

$$F = -((2x)^2 - 5^2)$$

$$F = -(4x^2 - 25)$$

$$F = -4x^2 + 25$$

4 / ٧ ٤ ١ /

انشر العبارات الحرفية التالية :

$$A = (3x - 1)^2$$

$$A = (3x)^2 - 2 \times 3x \times 1 + 1^2$$

$$A = 9x^2 - 6x + 1$$

$$B = (8x - 2) \times (8x + 2)$$

$$B = (8x)^2 - 2^2$$

$$B = 64x^2 - 4$$

$$C = (9x + 5)^2$$

$$C = (9x)^2 + 2 \times 9x \times 5 + 5^2$$

$$C = 81x^2 + 90x + 25$$

$$D = (9x + 4) \times (4x - 9)$$

$$D = 9x \times 4x + 9x \times (-9) + 4 \times 4x + 4 \times (-9)$$

$$D = 36x^2 - 81x + 16x - 36$$

$$D = 36x^2 + (-81 + 16)x - 36$$

$$D = 36x^2 - 65x - 36$$

$$E = -(7x + 1) \times (7x - 1)$$

$$E = -((7x)^2 - 1^2)$$

$$E = -(49x^2 - 1)$$

$$E = -49x^2 + 1$$

$$F = \left(\frac{8}{5}x + 6\right) \times \left(6x - \frac{8}{5}\right)$$

$$F = \frac{8}{5}x \times 6x + \frac{8}{5}x \times \left(-\frac{8}{5}\right) + 6 \times 6x + 6 \times \left(-\frac{8}{5}\right)$$

$$F = \frac{48}{5}x^2 - \frac{64}{25}x + 36x - \frac{48}{5}$$

$$F = \frac{48}{5}x^2 + \left(\frac{-64}{25} + 36\right)x - \frac{48}{5}$$

$$F = \frac{48}{5}x^2 + \left(\frac{-64}{25} + \frac{36 \times 25}{1 \times 25}\right)x - \frac{48}{5}$$

$$F = \frac{48}{5}x^2 + \left(\frac{-64}{25} + \frac{900}{25}\right)x - \frac{48}{5}$$

$$F = \frac{48}{5}x^2 + \frac{836}{25}x - \frac{48}{5}$$

5 / ٧ ٤ ١ /

انشر العبارات الحرفية التالية :

$$A = (10x - 8)^2$$

$$A = (10x)^2 - 2 \times 10x \times 8 + 8^2$$

$$A = 100x^2 - 160x + 64$$

$$B = (3x - 9) \times (3x + 9)$$

$$B = (3x)^2 - 9^2$$

$$B = 9x^2 - 81$$

$$C = (5x + 7)^2$$

$$C = (5x)^2 + 2 \times 5x \times 7 + 7^2$$

$$C = 25x^2 + 70x + 49$$

$$D = (5x - 10) \times (10x + 5)$$

$$D = 5x \times 10x + 5x \times 5 - 10 \times 10x - 10 \times 5$$

$$D = 50x^2 + 25x - 100x - 50$$

$$D = 50x^2 + (25 - 100)x - 50$$

$$D = 50x^2 - 75x - 50$$

$$E = \left(x + \frac{7}{2}\right)^2$$

$$E = x^2 + 2 \times x \times \frac{7}{2} + \left(\frac{7}{2}\right)^2$$

$$E = x^2 + 2 \times x \times \frac{7}{2} + \frac{49}{4}$$

$$E = x^2 + \frac{7 \times 2}{1 \times 2}x + \frac{49}{4}$$

$$E = x^2 + 7x + \frac{49}{4}$$

$$F = -(9x - 10)^2$$

$$F = -((9x)^2 - 2 \times 9x \times 10 + 10^2)$$

$$F = -(81x^2 - 180x + 100)$$

$$F = -81x^2 + 180x - 100$$

6 / ٦ / ٦

انشر العبارات الحرفية التالية :

$$A = (6x - 8) \times (6x + 8)$$

$$A = (6x)^2 - 8^2$$

$$A = 36x^2 - 64$$

$$B = (9x - 10)^2$$

$$B = (9x)^2 - 2 \times 9x \times 10 + 10^2$$

$$B = 81x^2 - 180x + 100$$

$$C = (9x - 7) \times (7x + 9)$$

$$C = 9x \times 7x + 9x \times 9 - 7 \times 7x - 7 \times 9$$

$$C = 63x^2 + 81x - 49x - 63$$

$$C = 63x^2 + (81 - 49)x - 63$$

$$C = 63x^2 + 32x - 63$$

$$D = (5x + 6)^2$$

$$D = (5x)^2 + 2 \times 5x \times 6 + 6^2$$

$$D = 25x^2 + 60x + 36$$

$$E = -(5x - 10) \times (10x + 5)$$

$$E = -(5x \times 10x + 5x \times 5 - 10 \times 10x - 10 \times 5)$$

$$E = -(50x^2 + 25x - 100x - 50)$$

$$E = -(50x^2 + (25 - 100)x - 50)$$

$$E = -(50x^2 - 75x - 50)$$

$$E = -50x^2 + 75x + 50$$

$$F = \left(\frac{7}{8}x - 4\right)^2$$

$$F = \left(\frac{7}{8}x\right)^2 + 2 \times \frac{7}{8}x \times 4 + 4^2$$

$$F = \frac{49}{64}x^2 + \frac{7 \times 8}{1 \times 8}x + 16$$

$$F = \frac{49}{64}x^2 + 7x + 16$$

7 / ٧ / ٧

انشر العبارات الحرفية التالية :

$$A = (2x - 5)^2$$

$$A = (2x)^2 - 2 \times 2x \times 5 + 5^2$$

$$A = 4x^2 - 20x + 25$$

$$B = (9x + 10) \times (10x - 9)$$

$$B = 9x \times 10x + 9x \times (-9) + 10 \times 10x + 10 \times (-9)$$

$$B = 90x^2 - 81x + 100x - 90$$

$$B = 90x^2 + (-81 + 100)x - 90$$

$$B = 90x^2 + 19x - 90$$

$$C = (9x + 6)^2$$

$$C = (9x)^2 + 2 \times 9x \times 6 + 6^2$$

$$C = 81x^2 + 108x + 36$$

$$D = (2x - 3) \times (2x + 3)$$

$$D = (2x)^2 - 3^2$$

$$D = 4x^2 - 9$$

$$E = -(8x + 5) \times (5x - 8)$$

$$E = -(8x \times 5x + 8x \times (-8) + 5 \times 5x + 5 \times (-8))$$

$$E = -(40x^2 - 64x + 25x - 40)$$

$$E = -(40x^2 + (-64 + 25)x - 40)$$

$$E = -(40x^2 - 39x - 40)$$

$$E = -40x^2 + 39x + 40$$

$$F = \left(\frac{8}{3}x - \frac{8}{9}\right)^2$$

$$F = \left(\frac{8}{3}x\right)^2 - 2 \times \frac{8}{3}x \times \frac{8}{9} + \left(\frac{8}{9}\right)^2$$

$$F = \frac{64}{9}x^2 - \frac{128}{27}x + \frac{64}{81}$$

8 / ٨

انشر العبارات الحرفية التالية :

$$A = (7x - 6)^2$$

$$A = (7x)^2 - 2 \times 7x \times 6 + 6^2$$

$$A = 49x^2 - 84x + 36$$

$$B = (10x - 8) \times (10x + 8)$$

$$B = (10x)^2 - 8^2$$

$$B = 100x^2 - 64$$

$$C = (6x + 6)^2$$

$$C = (6x)^2 + 2 \times 6x \times 6 + 6^2$$

$$C = 36x^2 + 72x + 36$$

$$D = (5x + 6) \times (6x - 5)$$

$$D = 5x \times 6x + 5x \times (-5) + 6 \times 6x + 6 \times (-5)$$

$$D = 30x^2 - 25x + 36x - 30$$

$$D = 30x^2 + (-25 + 36)x - 30$$

$$D = 30x^2 + 11x - 30$$

$$E = \left(\frac{8}{7}x - \frac{2}{5}\right) \times \left(\frac{2}{5}x + \frac{8}{7}\right)$$

$$E = \frac{8}{7}x \times \frac{2}{5}x + \frac{8}{7}x \times \frac{8}{7} - \frac{2}{5} \times \frac{2}{5}x - \frac{2}{5} \times \frac{8}{7}$$

$$E = \frac{16}{35}x^2 + \frac{64}{49}x - \frac{4}{25}x - \frac{16}{35}$$

$$E = \frac{16}{35}x^2 + \left(\frac{64}{49} - \frac{4}{25}\right)x - \frac{16}{35}$$

$$E = \frac{16}{35}x^2 + \left(\frac{64 \times 25}{49 \times 25} - \frac{4 \times 49}{25 \times 49}\right)x - \frac{16}{35}$$

$$E = \frac{16}{35}x^2 + \left(\frac{1600}{1225} - \frac{196}{1225}\right)x - \frac{16}{35}$$

$$E = \frac{16}{35}x^2 + \frac{1404}{1225}x - \frac{16}{35}$$

$$F = -(4x - 5) \times (4x + 5)$$

$$F = -((4x)^2 - 5^2)$$

$$F = -(16x^2 - 25)$$

$$F = -16x^2 + 25$$

9 / ٩

انشر العبارات الحرفية التالية :

$$A = (2x + 2) \times (2x - 2)$$

$$A = (2x)^2 - 2^2$$

$$A = 4x^2 - 4$$

$$B = (6x - 3) \times (3x + 6)$$

$$B = 6x \times 3x + 6x \times 6 - 3 \times 3x - 3 \times 6$$

$$B = 18x^2 + 36x - 9x - 18$$

$$B = 18x^2 + (36 - 9)x - 18$$

$$B = 18x^2 + 27x - 18$$

$$C = (10x + 1)^2$$

$$C = (10x)^2 + 2 \times 10x \times 1 + 1^2$$

$$C = 100x^2 + 20x + 1$$

$$D = (10x - 5)^2$$

$$D = (10x)^2 - 2 \times 10x \times 5 + 5^2$$

$$D = 100x^2 - 100x + 25$$

$$E = \left(\frac{3}{7}x - \frac{7}{3}\right) \times \left(\frac{7}{3}x + \frac{3}{7}\right)$$

$$E = \frac{3}{7}x \times \frac{7}{3}x + \frac{3}{7}x \times \frac{3}{7} - \frac{7}{3} \times \frac{7}{3}x - \frac{7}{3} \times \frac{3}{7}$$

$$E = x^2 + \frac{9}{49}x - \frac{49}{9}x - \frac{1 \times 21}{1 \times 21}$$

$$E = x^2 + \left(\frac{9}{49} - \frac{49}{9}\right)x - \frac{1 \times 21}{1 \times 21}$$

$$E = x^2 + \left(\frac{9 \times 9}{49 \times 9} - \frac{49 \times 49}{9 \times 49}\right)x - 1$$

$$E = x^2 + \left(\frac{81}{441} - \frac{2401}{441}\right)x - 1$$

$$E = x^2 - \frac{2320}{441}x - 1$$

$$F = -(9x + 2) \times (9x - 2)$$

$$F = -((9x)^2 - 2^2)$$

$$F = -(81x^2 - 4)$$

$$F = -81x^2 + 4$$

10 / ١٠ / ١٠

انشر العبارات الحرفية التالية :

$$A = (9x + 4) \times (9x - 4)$$

$$A = (9x)^2 - 4^2$$

$$A = 81x^2 - 16$$

$$B = (3x + 4) \times (4x - 3)$$

$$B = 3x \times 4x + 3x \times (-3) + 4 \times 4x + 4 \times (-3)$$

$$B = 12x^2 - 9x + 16x - 12$$

$$B = 12x^2 + (-9 + 16)x - 12$$

$$B = 12x^2 + 7x - 12$$

$$C = (4x + 1)^2$$

$$C = (4x)^2 + 2 \times 4x \times 1 + 1^2$$

$$C = 16x^2 + 8x + 1$$

$$D = (5x - 5)^2$$

$$D = (5x)^2 - 2 \times 5x \times 5 + 5^2$$

$$D = 25x^2 - 50x + 25$$

$$E = \left(\frac{1}{3}x - \frac{7}{6}\right) \times \left(\frac{1}{3}x + \frac{7}{6}\right)$$

$$E = \left(\frac{1}{3}x\right)^2 - \left(\frac{7}{6}\right)^2$$

$$E = \frac{1}{9}x^2 - \frac{49}{36}$$

$$F = -(5x - 2) \times (2x + 5)$$

$$F = -(5x \times 2x + 5x \times 5 - 2 \times 2x - 2 \times 5)$$

$$F = -(10x^2 + 25x - 4x - 10)$$

$$F = -(10x^2 + (25 - 4)x - 10)$$

$$F = -(10x^2 + 21x - 10)$$

$$F = -10x^2 - 21x + 10$$

11 / ١١ / ١١

انشر العبارات الحرفية التالية :

$$A = (9x - 7)^2$$

$$A = (9x)^2 - 2 \times 9x \times 7 + 7^2$$

$$A = 81x^2 - 126x + 49$$

$$B = (2x + 9) \times (2x - 9)$$

$$B = (2x)^2 - 9^2$$

$$B = 4x^2 - 81$$

$$C = (10x + 2)^2$$

$$C = (10x)^2 + 2 \times 10x \times 2 + 2^2$$

$$C = 100x^2 + 40x + 4$$

$$D = (10x - 10) \times (10x + 10)$$

$$D = (10x)^2 - 10^2$$

$$D = 100x^2 - 100$$

$$E = -(4x + 3)^2$$

$$E = -((4x)^2 + 2 \times 4x \times 3 + 3^2)$$

$$E = -(16x^2 + 24x + 9)$$

$$E = -16x^2 - 24x - 9$$

$$F = \left(\frac{10}{3}x - 2\right) \times \left(\frac{10}{3}x + 2\right)$$

$$F = \left(\frac{10}{3}x\right)^2 - 2^2$$

$$F = \frac{100}{9}x^2 - 4$$

12 / ٧ ٤ ٩ /

انشر العبارات الحرفية التالية :

$$A = (8x + 7) \times (7x - 8)$$

$$A = 8x \times 7x + 8x \times (-8) + 7 \times 7x + 7 \times (-8)$$

$$A = 56x^2 - 64x + 49x - 56$$

$$A = 56x^2 + (-64 + 49)x - 56$$

$$A = 56x^2 - 15x - 56$$

$$B = (6x + 4)^2$$

$$B = (6x)^2 + 2 \times 6x \times 4 + 4^2$$

$$B = 36x^2 + 48x + 16$$

$$C = (8x - 1) \times (8x + 1)$$

$$C = (8x)^2 - 1^2$$

$$C = 64x^2 - 1$$

$$D = (5x - 6)^2$$

$$D = (5x)^2 - 2 \times 5x \times 6 + 6^2$$

$$D = 25x^2 - 60x + 36$$

$$E = \left(\frac{1}{2}x + 5\right) \times \left(5x - \frac{1}{2}\right)$$

$$E = \frac{1}{2}x \times 5x + \frac{1}{2}x \times \left(-\frac{1}{2}\right) + 5 \times 5x + 5 \times \left(-\frac{1}{2}\right)$$

$$E = \frac{5}{2}x^2 - \frac{1}{4}x + 25x - \frac{5}{2}$$

$$E = \frac{5}{2}x^2 + \left(\frac{-1}{4} + 25\right)x - \frac{5}{2}$$

$$E = \frac{5}{2}x^2 + \left(\frac{-1}{4} + \frac{25 \times 4}{1 \times 4}\right)x - \frac{5}{2}$$

$$E = \frac{5}{2}x^2 + \left(\frac{-1}{4} + \frac{100}{4}\right)x - \frac{5}{2}$$

$$E = \frac{5}{2}x^2 + \frac{99}{4}x - \frac{5}{2}$$

$$F = -(3x + 3)^2$$

$$F = -((3x)^2 + 2 \times 3x \times 3 + 3^2)$$

$$F = -(9x^2 + 18x + 9)$$

$$F = -9x^2 - 18x - 9$$

13 / ٧ ٤ ٩ /

انشر العبارات الحرفية التالية :

$$A = (2x + 1) \times (x - 2)$$

$$A = 2x \times x + 2x \times (-2) + 1 \times x + 1 \times (-2)$$

$$A = 2x^2 - 4x + x - 2$$

$$A = 2x^2 + (-4 + 1)x - 2$$

$$A = 2x^2 - 3x - 2$$

$$B = (7x - 2)^2$$

$$B = (7x)^2 - 2 \times 7x \times 2 + 2^2$$

$$B = 49x^2 - 28x + 4$$

$$C = (x + 2)^2$$

$$C = x^2 + 2 \times x \times 2 + 2^2$$

$$C = x^2 + 4x + 4$$

$$D = (10x + 1) \times (10x - 1)$$

$$D = (10x)^2 - 1^2$$

$$D = 100x^2 - 1$$

$$E = -(9x - 1)^2$$

$$E = -((9x)^2 - 2 \times 9x \times 1 + 1^2)$$

$$E = -(81x^2 - 18x + 1)$$

$$E = -81x^2 + 18x - 1$$

$$F = \left(\frac{3}{4}x + \frac{7}{10}\right) \times \left(\frac{7}{10}x - \frac{3}{4}\right)$$

$$F = \frac{3}{4}x \times \frac{7}{10}x + \frac{3}{4}x \times \left(-\frac{3}{4}\right) + \frac{7}{10} \times \frac{7}{10}x + \frac{7}{10} \times \left(-\frac{3}{4}\right)$$

$$F = \frac{21}{40}x^2 - \frac{9}{16}x + \frac{49}{100}x - \frac{21}{40}$$

$$F = \frac{21}{40}x^2 + \left(\frac{-9}{16} + \frac{49}{100}\right)x - \frac{21}{40}$$

$$F = \frac{21}{40}x^2 + \left(\frac{-9 \times 25}{16 \times 25} + \frac{49 \times 4}{100 \times 4}\right)x - \frac{21}{40}$$

$$F = \frac{21}{40}x^2 + \left(\frac{-225}{400} + \frac{196}{400}\right)x - \frac{21}{40}$$

$$F = \frac{21}{40}x^2 - \frac{29}{400}x - \frac{21}{40}$$

14 / ١٤ / ٢٠٢١

انشر العبارات الحرفية التالية :

$$A = (10x - 8)^2$$

$$A = (10x)^2 - 2 \times 10x \times 8 + 8^2$$

$$A = 100x^2 - 160x + 64$$

$$B = (9x - 2) \times (2x + 9)$$

$$B = 9x \times 2x + 9x \times 9 - 2 \times 2x - 2 \times 9$$

$$B = 18x^2 + 81x - 4x - 18$$

$$B = 18x^2 + (81 - 4)x - 18$$

$$B = 18x^2 + 77x - 18$$

$$C = (8x - 8) \times (8x + 8)$$

$$C = (8x)^2 - 8^2$$

$$C = 64x^2 - 64$$

$$D = (6x + 7)^2$$

$$D = (6x)^2 + 2 \times 6x \times 7 + 7^2$$

$$D = 36x^2 + 84x + 49$$

$$E = \left(\frac{7}{2}x - \frac{7}{8}\right) \times \left(\frac{7}{8}x + \frac{7}{2}\right)$$

$$E = \frac{7}{2}x \times \frac{7}{8}x + \frac{7}{2}x \times \frac{7}{2} - \frac{7}{8} \times \frac{7}{8}x - \frac{7}{8} \times \frac{7}{2}$$

$$E = \frac{49}{16}x^2 + \frac{49}{4}x - \frac{49}{64}x - \frac{49}{16}$$

$$E = \frac{49}{16}x^2 + \left(\frac{49}{4} - \frac{49}{64}\right)x - \frac{49}{16}$$

$$E = \frac{49}{16}x^2 + \left(\frac{49 \times 16}{4 \times 16} - \frac{49}{64}\right)x - \frac{49}{16}$$

$$E = \frac{49}{16}x^2 + \left(\frac{784}{64} - \frac{49}{64}\right)x - \frac{49}{16}$$

$$E = \frac{49}{16}x^2 + \frac{735}{64}x - \frac{49}{16}$$

$$F = -(5x - 9) \times (5x + 9)$$

$$F = -((5x)^2 - 9^2)$$

$$F = -(25x^2 - 81)$$

$$F = -25x^2 + 81$$

15 / ١٥ / ٢٠٢١

انشر العبارات الحرفية التالية :

$$A = (4x + 7) \times (4x - 7)$$

$$A = (4x)^2 - 7^2$$

$$A = 16x^2 - 49$$

$$B = (3x + 1)^2$$

$$B = (3x)^2 + 2 \times 3x \times 1 + 1^2$$

$$B = 9x^2 + 6x + 1$$

$$C = (7x - 7) \times (7x + 7)$$

$$C = (7x)^2 - 7^2$$

$$C = 49x^2 - 49$$

$$D = (8x - 5)^2$$

$$D = (8x)^2 - 2 \times 8x \times 5 + 5^2$$

$$D = 64x^2 - 80x + 25$$

$$E = -(2x - 9)^2$$

$$E = -((2x)^2 - 2 \times 2x \times 9 + 9^2)$$

$$E = -(4x^2 - 36x + 81)$$

$$E = -4x^2 + 36x - 81$$

$$F = \left(\frac{10}{9}x + \frac{8}{7}\right) \times \left(\frac{8}{7}x - \frac{10}{9}\right)$$

$$F = \frac{10}{9}x \times \frac{8}{7}x + \frac{10}{9}x \times \left(-\frac{10}{9}\right) + \frac{8}{7} \times \frac{8}{7}x + \frac{8}{7} \times \left(-\frac{10}{9}\right)$$

$$F = \frac{80}{63}x^2 - \frac{100}{81}x + \frac{64}{49}x - \frac{80}{63}$$

$$F = \frac{80}{63}x^2 + \left(\frac{-100}{81} + \frac{64}{49}\right)x - \frac{80}{63}$$

$$F = \frac{80}{63}x^2 + \left(\frac{-100 \times 49}{81 \times 49} + \frac{64 \times 81}{49 \times 81}\right)x - \frac{80}{63}$$

$$F = \frac{80}{63}x^2 + \left(\frac{-4900}{3969} + \frac{5184}{3969}\right)x - \frac{80}{63}$$

$$F = \frac{80}{63}x^2 + \frac{284}{3969}x - \frac{80}{63}$$

16 / التمرين

انشر العبارات الحرفية التالية :

$$A = (8x - 9)^2$$

$$A = (8x)^2 - 2 \times 8x \times 9 + 9^2$$

$$A = 64x^2 - 144x + 81$$

$$B = (4x - 9) \times (9x + 4)$$

$$B = 4x \times 9x + 4x \times 4 - 9 \times 9x - 9 \times 4$$

$$B = 36x^2 + 16x - 81x - 36$$

$$B = 36x^2 + (16 - 81)x - 36$$

$$B = 36x^2 - 65x - 36$$

$$C = (4x + 8)^2$$

$$C = (4x)^2 + 2 \times 4x \times 8 + 8^2$$

$$C = 16x^2 + 64x + 64$$

$$D = (6x - 10) \times (6x + 10)$$

$$D = (6x)^2 - 10^2$$

$$D = 36x^2 - 100$$

$$E = -(2x + 4)^2$$

$$E = -((2x)^2 + 2 \times 2x \times 4 + 4^2)$$

$$E = -(4x^2 + 16x + 16)$$

$$E = -4x^2 - 16x - 16$$

$$F = \left(\frac{1}{8}x - \frac{9}{5}\right)^2$$

$$F = \left(\frac{1}{8}x\right)^2 - 2 \times \frac{1}{8}x \times \frac{9}{5} + \left(\frac{9}{5}\right)^2$$

$$F = \frac{1}{64}x^2 - \frac{9 \times 2}{20 \times 2}x + \frac{81}{25}$$

$$F = \frac{1}{64}x^2 - \frac{9}{20}x + \frac{81}{25}$$

17 / التمرين

انشر العبارات الحرفية التالية :

$$A = (5x - 7)^2$$

$$A = (5x)^2 - 2 \times 5x \times 7 + 7^2$$

$$A = 25x^2 - 70x + 49$$

$$B = (10x - 7) \times (10x + 7)$$

$$B = (10x)^2 - 7^2$$

$$B = 100x^2 - 49$$

$$C = (8x + 7)^2$$

$$C = (8x)^2 + 2 \times 8x \times 7 + 7^2$$

$$C = 64x^2 + 112x + 49$$

$$D = (4x - 9) \times (9x + 4)$$

$$D = 4x \times 9x + 4x \times 4 - 9 \times 9x - 9 \times 4$$

$$D = 36x^2 + 16x - 81x - 36$$

$$D = 36x^2 + (16 - 81)x - 36$$

$$D = 36x^2 - 65x - 36$$

$$E = \left(\frac{5}{8}x + \frac{5}{8}\right) \times \left(\frac{5}{8}x - \frac{5}{8}\right)$$

$$E = \left(\frac{5}{8}x\right)^2 - \left(\frac{5}{8}\right)^2$$

$$E = \frac{25}{64}x^2 - \frac{25}{64}$$

$$F = -(2x - 5) \times (5x + 2)$$

$$F = -(2x \times 5x + 2x \times 2 - 5 \times 5x - 5 \times 2)$$

$$F = -(10x^2 + 4x - 25x - 10)$$

$$F = -(10x^2 + (4 - 25)x - 10)$$

$$F = -(10x^2 - 21x - 10)$$

$$F = -10x^2 + 21x + 10$$

انشر العبارات الحرفية التالية :

$$A = (10x - 9)^2$$

$$A = (10x)^2 - 2 \times 10x \times 9 + 9^2$$

$$A = 100x^2 - 180x + 81$$

$$B = (8x + 10) \times (10x - 8)$$

$$B = 8x \times 10x + 8x \times (-8) + 10 \times 10x + 10 \times (-8)$$

$$B = 80x^2 - 64x + 100x - 80$$

$$B = 80x^2 + (-64 + 100)x - 80$$

$$B = 80x^2 + 36x - 80$$

$$C = (2x + 3)^2$$

$$C = (2x)^2 + 2 \times 2x \times 3 + 3^2$$

$$C = 4x^2 + 12x + 9$$

$$D = (x - 9) \times (x + 9)$$

$$D = x^2 - 9^2$$

$$D = x^2 - 81$$

$$E = \left(\frac{3}{2}x - \frac{7}{4}\right)^2$$

$$E = \left(\frac{3}{2}x\right)^2 - 2 \times \frac{3}{2}x \times \frac{7}{4} + \left(\frac{7}{4}\right)^2$$

$$E = \frac{9}{4}x^2 - \frac{21 \times 2}{4 \times 2}x + \frac{49}{16}$$

$$E = \frac{9}{4}x^2 - \frac{21}{4}x + \frac{49}{16}$$

$$F = -(8x - 4) \times (4x + 8)$$

$$F = -(8x \times 4x + 8x \times 8 - 4 \times 4x - 4 \times 8)$$

$$F = -(32x^2 + 64x - 16x - 32)$$

$$F = -(32x^2 + (64 - 16)x - 32)$$

$$F = -(32x^2 + 48x - 32)$$

$$F = -32x^2 - 48x + 32$$

انشر العبارات الحرفية التالية :

$$A = (7x - 10)^2$$

$$A = (7x)^2 - 2 \times 7x \times 10 + 10^2$$

$$A = 49x^2 - 140x + 100$$

$$B = (5x + 3)^2$$

$$B = (5x)^2 + 2 \times 5x \times 3 + 3^2$$

$$B = 25x^2 + 30x + 9$$

$$C = (8x - 2) \times (8x + 2)$$

$$C = (8x)^2 - 2^2$$

$$C = 64x^2 - 4$$

$$D = (8x - 6) \times (6x + 8)$$

$$D = 8x \times 6x + 8x \times 8 - 6 \times 6x - 6 \times 8$$

$$D = 48x^2 + 64x - 36x - 48$$

$$D = 48x^2 + (64 - 36)x - 48$$

$$D = 48x^2 + 28x - 48$$

$$E = \left(\frac{5}{6}x + \frac{1}{9}\right)^2$$

$$E = \left(\frac{5}{6}x\right)^2 + 2 \times \frac{5}{6}x \times \frac{1}{9} + \left(\frac{1}{9}\right)^2$$

$$E = \frac{25}{36}x^2 + \frac{5 \times 2}{27 \times 2}x + \frac{1}{81}$$

$$E = \frac{25}{36}x^2 + \frac{5}{27}x + \frac{1}{81}$$

$$F = -(6x - 2) \times (6x + 2)$$

$$F = -((6x)^2 - 2^2)$$

$$F = -(36x^2 - 4)$$

$$F = -36x^2 + 4$$

حلّ العبارات الحرفية التالية :

$$A = (x - 1) \times (4x + 6) + (4x + 6) \times (5x + 6)$$

$$A = (4x + 6) \times (x - 1 + 5x + 6)$$

$$A = (4x + 6) \times (x + 5x - 1 + 6)$$

$$A = (4x + 6) \times (6x + 5)$$

$$B = -16x^2 + 49$$

$$B = (\sqrt{49})^2 - (\sqrt{16}x)^2$$

$$B = (\sqrt{49}\sqrt{16}x) \times (\sqrt{49} - (\sqrt{16}x))$$

$$B = (\sqrt{16}x + \sqrt{49}) \times (7 - 4x)$$

$$B = (\sqrt{16}x + \sqrt{49}) \times (-4x + 7)$$

$$B = (4x + 7) \times (-4x + 7)$$

$$C = -49 + (8x - 1)^2$$

$$C = -7^2 + (8x - 1)^2$$

$$C = (8x - 1 + 7) \times (8x - 1 - 7)$$

$$C = (8x + 6) \times (8x - 8)$$

$$D = 64x^2 - 64x + 16$$

$$D = (8x)^2 - 2 \times 8x \times 4 + 4^2$$

$$D = (8x - 4)^2$$

$$E = (2x - 3)^2 + (2x - 3) \times (-6x + 5)$$

$$E = (2x - 3) \times (2x - 3) + (2x - 3) \times (-6x + 5)$$

$$E = (2x - 3) \times (2x - 3 - 6x + 5)$$

$$E = (2x - 3) \times (2x - 6x - 3 + 5)$$

$$E = (2x - 3) \times (-4x + 2)$$

$$F = -(10x + 9) + (10x + 9) \times (10x + 5)$$

$$F = -(10x + 9) \times 1 + (10x + 9) \times (10x + 5)$$

$$F = (10x + 9) \times (-1 + 10x + 5)$$

$$F = (10x + 9) \times (10x - 1 + 5)$$

$$F = (10x + 9) \times (10x + 4)$$

حلّ العبارات الحرفية التالية :

$$A = -36x^2 + 16$$

$$A = (\sqrt{16})^2 - (\sqrt{36}x)^2$$

$$A = (\sqrt{16}\sqrt{36}x) \times (\sqrt{16} - (\sqrt{36}x))$$

$$A = (\sqrt{36}x + \sqrt{16}) \times (4 - 6x)$$

$$A = (\sqrt{36}x + \sqrt{16}) \times (-6x + 4)$$

$$A = (6x + 4) \times (-6x + 4)$$

$$B = 16x^2 + 16x + 4$$

$$B = (4x)^2 + 2 \times 4x \times 2 + 2^2$$

$$B = (4x + 2)^2$$

$$C = (-x + 1) \times (6x + 2) + (3x - 9) \times (6x + 2)$$

$$C = (6x + 2) \times (-x + 1 + 3x - 9)$$

$$C = (6x + 2) \times (-x + 3x + 1 - 9)$$

$$C = (6x + 2) \times (2x - 8)$$

$$D = -(6x - 9)^2 + 81x^2$$

$$D = -(6x - 9)^2 + (9x)^2$$

$$D = (9x + 6x - 9) \times (9x - (6x - 9))$$

$$D = (15x - 9) \times (9x - 6x + 9)$$

$$D = (15x - 9) \times (3x + 9)$$

$$E = (-3x - 3)^2 + (3x + 9) \times (-3x - 3)$$

$$E = (-3x - 3) \times (-3x - 3) + (3x + 9) \times (-3x - 3)$$

$$E = (-3x - 3) \times (-3x - 3 + 3x + 9)$$

$$E = (-3x - 3) \times (-3x + 3x - 3 + 9)$$

$$E = (-3x - 3) \times 6$$

$$F = 6x + 3 - (6x + 3) \times (8x + 5)$$

$$F = (6x + 3) \times 1 - (6x + 3) \times (8x + 5)$$

$$F = (6x + 3) \times (1 - (8x + 5))$$

$$F = (6x + 3) \times (1 - 8x - 5)$$

$$F = (6x + 3) \times (-8x + 1 - 5)$$

$$F = (6x + 3) \times (-8x - 4)$$

حلّ العبارات الحرفية التالية :

$$A = 25x^2 - 10x + 1$$

$$A = (5x)^2 - 2 \times 5x \times 1 + 1^2$$

$$A = (5x - 1)^2$$

$$B = -9x^2 + 9$$

$$B = (\sqrt{9})^2 - (\sqrt{9}x)^2$$

$$B = (\sqrt{9}\sqrt{9}x) \times (\sqrt{9} - (\sqrt{9}x))$$

$$B = (\sqrt{9}x + \sqrt{9}) \times (3 - 3x)$$

$$B = (\sqrt{9}x + \sqrt{9}) \times (-3x + 3)$$

$$B = (3x + 3) \times (-3x + 3)$$

$$C = (-4x + 9)^2 - 4$$

$$C = (-4x + 9)^2 - 2^2$$

$$C = (-4x + 9 + 2) \times (-4x + 9 - 2)$$

$$C = (-4x + 11) \times (-4x + 7)$$

$$D = (-5x - 7) \times (-10x + 7) - (-5x - 7) \times (3x + 2)$$

$$D = (-5x - 7) \times (-10x + 7 - (3x + 2))$$

$$D = (-5x - 7) \times (-10x + 7 - 3x - 2)$$

$$D = (-5x - 7) \times (-10x - 3x + 7 - 2)$$

$$D = (-5x - 7) \times (-13x + 5)$$

$$E = (7x + 2) \times (8x + 5) + 7x + 2$$

$$E = (7x + 2) \times (8x + 5) + (7x + 2) \times 1$$

$$E = (7x + 2) \times (8x + 5 + 1)$$

$$E = (7x + 2) \times (8x + 6)$$

$$F = (-2x + 6)^2 + (7x - 5) \times (-2x + 6)$$

$$F = (-2x + 6) \times (-2x + 6) + (7x - 5) \times (-2x + 6)$$

$$F = (-2x + 6) \times (-2x + 6 + 7x - 5)$$

$$F = (-2x + 6) \times (-2x + 7x + 6 - 5)$$

$$F = (-2x + 6) \times (5x + 1)$$

4 7 7

حلّ العبارات الحرفية التالية :

$$A = 81x^2 + 180x + 100$$

$$A = (9x)^2 + 2 \times 9x \times 10 + 10^2$$

$$A = (9x + 10)^2$$

$$B = -(8x + 7) \times (x - 6) + (x - 6) \times (9x + 6)$$

$$B = (x - 6) \times (-(8x + 7) + 9x + 6)$$

$$B = (x - 6) \times (-8x - 7 + 9x + 6)$$

$$B = (x - 6) \times (-8x + 9x - 7 + 6)$$

$$B = (x - 6) \times (x - 1)$$

$$C = 25x^2 - 49$$

$$C = (\sqrt{25}x)^2 - (\sqrt{49})^2$$

$$C = (\sqrt{25}x\sqrt{49}) \times (\sqrt{25}x - (\sqrt{49}))$$

$$C = (5x + 7) \times (5x - 7)$$

$$D = (-8x + 2)^2 - 100$$

$$D = (-8x + 2)^2 - 10^2$$

$$D = (-8x + 2 + 10) \times (-8x + 2 - 10)$$

$$D = (-8x + 12) \times (-8x - 8)$$

$$E = (-7x + 7) \times (3x - 3) + (3x - 3)^2$$

$$E = (-7x + 7) \times (3x - 3) + (3x - 3) \times (3x - 3)$$

$$E = (3x - 3) \times (-7x + 7 + 3x - 3)$$

$$E = (3x - 3) \times (-7x + 3x + 7 - 3)$$

$$E = (3x - 3) \times (-4x + 4)$$

$$F = 5x + 9 + (2x + 10) \times (5x + 9)$$

$$F = (5x + 9) \times 1 + (2x + 10) \times (5x + 9)$$

$$F = (5x + 9) \times (1 + 2x + 10)$$

$$F = (5x + 9) \times (2x + 1 + 10)$$

$$F = (5x + 9) \times (2x + 11)$$

5 7 7

حلّ العبارات الحرفية التالية :

$$A = 100x^2 + 140x + 49$$

$$A = (10x)^2 + 2 \times 10x \times 7 + 7^2$$

$$A = (10x + 7)^2$$

$$B = -49x^2 + 49$$

$$B = (\sqrt{49})^2 - (\sqrt{49}x)^2$$

$$B = (\sqrt{49}\sqrt{49}x) \times (\sqrt{49} - (\sqrt{49}x))$$

$$B = (\sqrt{49}x + \sqrt{49}) \times (7 - 7x)$$

$$B = (\sqrt{49}x + \sqrt{49}) \times (-7x + 7)$$

$$B = (7x + 7) \times (-7x + 7)$$

$$C = (4x + 3) \times (3x - 9) + (4x + 3) \times (5x + 9)$$

$$C = (4x + 3) \times (3x - 9 + 5x + 9)$$

$$C = (4x + 3) \times (3x + 5x - 9 + 9)$$

$$C = (4x + 3) \times 8x$$

$$D = 81 - (5x + 8)^2$$

$$D = 9^2 - (5x + 8)^2$$

$$D = (9 + 5x + 8) \times (9 - (5x + 8))$$

$$D = (5x + 9 + 8) \times (9 - 5x - 8)$$

$$D = (5x + 9 + 8) \times (-5x + 9 - 8)$$

$$D = (5x + 17) \times (-5x + 1)$$

$$E = 2x + 1 + (4x - 2) \times (2x + 1)$$

$$E = (2x + 1) \times 1 + (4x - 2) \times (2x + 1)$$

$$E = (2x + 1) \times (1 + 4x - 2)$$

$$E = (2x + 1) \times (4x + 1 - 2)$$

$$E = (2x + 1) \times (4x - 1)$$

$$F = (5x + 4)^2 - (9x + 6) \times (5x + 4)$$

$$F = (5x + 4) \times (5x + 4) - (9x + 6) \times (5x + 4)$$

$$F = (5x + 4) \times (5x + 4 - (9x + 6))$$

$$F = (5x + 4) \times (5x + 4 - 9x - 6)$$

$$F = (5x + 4) \times (5x - 9x + 4 - 6)$$

$$F = (5x + 4) \times (-4x - 2)$$

6 7 8

حلّ العبارات الحرفية التالية :

$$A = 16x^2 - 8x + 1$$

$$A = (4x)^2 - 2 \times 4x \times 1 + 1^2$$

$$A = (4x - 1)^2$$

$$B = -(x - 6)^2 + 49x^2$$

$$B = -(x - 6)^2 + (7x)^2$$

$$B = (7x + x - 6) \times (7x - (x - 6))$$

$$B = (8x - 6) \times (7x - x + 6)$$

$$B = (8x - 6) \times (6x + 6)$$

$$C = -x^2 + 36$$

$$C = (\sqrt{36})^2 - (\sqrt{1}x)^2$$

$$C = (\sqrt{36}\sqrt{1}x) \times (\sqrt{36} - (\sqrt{1}x))$$

$$C = (\sqrt{1}x + \sqrt{36}) \times (6 - x)$$

$$C = (\sqrt{1}x + \sqrt{36}) \times (-x + 6)$$

$$C = (x + 6) \times (-x + 6)$$

$$D = (3x + 4) \times (10x + 2) - (3x + 4) \times (-3x + 10)$$

$$D = (3x + 4) \times (10x + 2 - (-3x + 10))$$

$$D = (3x + 4) \times (10x + 2 + 3x - 10)$$

$$D = (3x + 4) \times (10x + 3x + 2 - 10)$$

$$D = (3x + 4) \times (13x - 8)$$

$$E = (5x - 2) \times (7x + 3) + (5x - 2)^2$$

$$E = (5x - 2) \times (7x + 3) + (5x - 2) \times (5x - 2)$$

$$E = (5x - 2) \times (7x + 3 + 5x - 2)$$

$$E = (5x - 2) \times (7x + 5x + 3 - 2)$$

$$E = (5x - 2) \times (12x + 1)$$

$$F = 7x + 4 + (7x + 4) \times (2x + 2)$$

$$F = (7x + 4) \times 1 + (7x + 4) \times (2x + 2)$$

$$F = (7x + 4) \times (1 + 2x + 2)$$

$$F = (7x + 4) \times (2x + 1 + 2)$$

$$F = (7x + 4) \times (2x + 3)$$

7 8 9

حلّ العبارات الحرفية التالية :

$$A = 36x^2 + 12x + 1$$

$$A = (6x)^2 + 2 \times 6x \times 1 + 1^2$$

$$A = (6x + 1)^2$$

$$B = -49x^2 + 64$$

$$B = (\sqrt{64})^2 - (\sqrt{49}x)^2$$

$$B = (\sqrt{64}\sqrt{49}x) \times (\sqrt{64} - (\sqrt{49}x))$$

$$B = (\sqrt{49}x + \sqrt{64}) \times (8 - 7x)$$

$$B = (\sqrt{49}x + \sqrt{64}) \times (-7x + 8)$$

$$B = (7x + 8) \times (-7x + 8)$$

$$C = (5x + 2) \times (x - 3) - (x - 3) \times (-10x + 6)$$

$$C = (x - 3) \times (5x + 2) - (10x + 6)$$

$$C = (x - 3) \times (5x + 2 + 10x - 6)$$

$$C = (x - 3) \times (5x + 10x + 2 - 6)$$

$$C = (x - 3) \times (15x - 4)$$

$$D = -(3x + 8)^2 + 25$$

$$D = -(3x + 8)^2 + 5^2$$

$$D = (5 + 3x + 8) \times (5 - (3x + 8))$$

$$D = (3x + 5 + 8) \times (5 - 3x - 8)$$

$$D = (3x + 5 + 8) \times (-3x + 5 - 8)$$

$$D = (3x + 13) \times (-3x - 3)$$

$$E = (2x - 4) \times (4x + 6) + (4x + 6)^2$$

$$E = (2x - 4) \times (4x + 6) + (4x + 6) \times (4x + 6)$$

$$E = (4x + 6) \times (2x - 4 + 4x + 6)$$

$$E = (4x + 6) \times (2x + 4x - 4 + 6)$$

$$E = (4x + 6) \times (6x + 2)$$

$$F = (9x - 7) \times (10x + 2) + 9x - 7$$

$$F = (9x - 7) \times (10x + 2) + (9x - 7) \times 1$$

$$F = (9x - 7) \times (10x + 2 + 1)$$

$$F = (9x - 7) \times (10x + 3)$$

8 7 7

حلّ العبارات الحرفية التالية :

$$A = -81 + (7x + 6)^2$$

$$A = -9^2 + (7x + 6)^2$$

$$A = (7x + 6 + 9) \times (7x + 6 - 9)$$

$$A = (7x + 15) \times (7x - 3)$$

$$B = 9x^2 - 9$$

$$B = (\sqrt{9}x)^2 - (\sqrt{9})^2$$

$$B = (\sqrt{9}x\sqrt{9}) \times (\sqrt{9}x - (\sqrt{9}))$$

$$B = (3x + 3) \times (3x - 3)$$

$$C = -(6x + 4) \times (6x + 9) + (6x + 4) \times (2x + 2)$$

$$C = (6x + 4) \times (-(6x + 9) + 2x + 2)$$

$$C = (6x + 4) \times (-6x - 9 + 2x + 2)$$

$$C = (6x + 4) \times (-6x + 2x - 9 + 2)$$

$$C = (6x + 4) \times (-4x - 7)$$

$$D = 9x^2 - 48x + 64$$

$$D = (3x)^2 - 2 \times 3x \times 8 + 8^2$$

$$D = (3x - 8)^2$$

$$E = (2x - 6) \times (3x + 9) + 3x + 9$$

$$E = (2x - 6) \times (3x + 9) + (3x + 9) \times 1$$

$$E = (3x + 9) \times (2x - 6 + 1)$$

$$E = (3x + 9) \times (2x - 5)$$

$$F = (-7x + 9) \times (8x + 2) + (8x + 2)^2$$

$$F = (-7x + 9) \times (8x + 2) + (8x + 2) \times (8x + 2)$$

$$F = (8x + 2) \times (-7x + 9 + 8x + 2)$$

$$F = (8x + 2) \times (-7x + 8x + 9 + 2)$$

$$F = (8x + 2) \times (x + 11)$$

9 7 7

حلّ العبارات الحرفية التالية :

$$A = 4x^2 - 28x + 49$$

$$A = (2x)^2 - 2 \times 2x \times 7 + 7^2$$

$$A = (2x - 7)^2$$

$$B = 16x^2 - (-7x + 6)^2$$

$$B = (4x)^2 - (-7x + 6)^2$$

$$B = (4x - 7x + 6) \times (4x - (-7x + 6))$$

$$B = (-3x + 6) \times (4x + 7x - 6)$$

$$B = (-3x + 6) \times (11x - 6)$$

$$C = 25x^2 - 100$$

$$C = (\sqrt{25}x)^2 - (\sqrt{100})^2$$

$$C = (\sqrt{25}x\sqrt{100}) \times (\sqrt{25}x - (\sqrt{100}))$$

$$C = (5x + 10) \times (5x - 10)$$

$$D = -(4x - 8) \times (6x + 10) + (6x + 9) \times (4x - 8)$$

$$D = (4x - 8) \times (-(6x + 10) + 6x + 9)$$

$$D = (4x - 8) \times (-6x - 10 + 6x + 9)$$

$$D = (4x - 8) \times (-6x + 6x - 10 + 9)$$

$$D = (4x - 8) \times (-1)$$

$$E = (6x - 9)^2 + (6x - 9) \times (4x - 6)$$

$$E = (6x - 9) \times (6x - 9) + (6x - 9) \times (4x - 6)$$

$$E = (6x - 9) \times (6x - 9 + 4x - 6)$$

$$E = (6x - 9) \times (6x + 4x - 9 - 6)$$

$$E = (6x - 9) \times (10x - 15)$$

$$F = (7x + 5) \times (7x + 10) + 7x + 10$$

$$F = (7x + 5) \times (7x + 10) + (7x + 10) \times 1$$

$$F = (7x + 10) \times (7x + 5 + 1)$$

$$F = (7x + 10) \times (7x + 6)$$

10 7 7

حلّ العبارات الحرفية التالية :

$$A = (9x - 9)^2 - 64$$

$$A = (9x - 9)^2 - 8^2$$

$$A = (9x - 9 + 8) \times (9x - 9 - 8)$$

$$A = (9x - 1) \times (9x - 17)$$

$$B = (6x + 1) \times (-6x + 9) + (6x + 1) \times (3x + 3)$$

$$B = (6x + 1) \times (-6x + 9 + 3x + 3)$$

$$B = (6x + 1) \times (-6x + 3x + 9 + 3)$$

$$B = (6x + 1) \times (-3x + 12)$$

$$C = 9x^2 + 30x + 25$$

$$C = (3x)^2 + 2 \times 3x \times 5 + 5^2$$

$$C = (3x + 5)^2$$

$$D = -4x^2 + 49$$

$$D = (\sqrt{49})^2 - (\sqrt{4}x)^2$$

$$D = (\sqrt{49}\sqrt{4}x) \times (\sqrt{49} - (\sqrt{4}x))$$

$$D = (\sqrt{4}x + \sqrt{49}) \times (7 - 2x)$$

$$D = (\sqrt{4}x + \sqrt{49}) \times (-2x + 7)$$

$$D = (2x + 7) \times (-2x + 7)$$

$$E = (x + 3) \times (5x + 9) + (5x + 9)^2$$

$$E = (x + 3) \times (5x + 9) + (5x + 9) \times (5x + 9)$$

$$E = (5x + 9) \times (x + 3 + 5x + 9)$$

$$E = (5x + 9) \times (x + 5x + 3 + 9)$$

$$E = (5x + 9) \times (6x + 12)$$

$$F = (8x + 2) \times (7x - 4) - (7x - 4)$$

$$F = (8x + 2) \times (7x - 4) - (7x - 4) \times 1$$

$$F = (7x - 4) \times (8x + 2 - 1)$$

$$F = (7x - 4) \times (8x + 1)$$

11 7 7

حلّ العبارات الحرفية التالية :

$$A = (6x - 2)^2 - 100x^2$$

$$A = (6x - 2)^2 - (10x)^2$$

$$A = (6x - 2 + 10x) \times (6x - 2 - 10x)$$

$$A = (6x + 10x - 2) \times (6x - 10x - 2)$$

$$A = (16x - 2) \times (-4x - 2)$$

$$B = 81x^2 - 100$$

$$B = (\sqrt{81}x)^2 - (\sqrt{100})^2$$

$$B = (\sqrt{81}x\sqrt{100}) \times (\sqrt{81}x - (\sqrt{100}))$$

$$B = (9x + 10) \times (9x - 10)$$

$$C = (6x - 2) \times (-x + 7) + (6x - 2) \times (2x + 7)$$

$$C = (6x - 2) \times (-x + 7 + 2x + 7)$$

$$C = (6x - 2) \times (-x + 2x + 7 + 7)$$

$$C = (6x - 2) \times (x + 14)$$

$$D = 81x^2 - 162x + 81$$

$$D = (9x)^2 - 2 \times 9x \times 9 + 9^2$$

$$D = (9x - 9)^2$$

$$E = (6x + 7) \times (-8x - 3) + (-8x - 3)^2$$

$$E = (6x + 7) \times (-8x - 3) + (-8x - 3) \times (-8x - 3)$$

$$E = (-8x - 3) \times (6x + 7 - 8x - 3)$$

$$E = (-8x - 3) \times (6x - 8x + 7 - 3)$$

$$E = (-8x - 3) \times (-2x + 4)$$

$$F = (x + 4) \times (4x + 3) - (x + 4)$$

$$F = (x + 4) \times (4x + 3) - (x + 4) \times 1$$

$$F = (x + 4) \times (4x + 3 - 1)$$

$$F = (x + 4) \times (4x + 2)$$

12 7 7

حلّ العبارات الحرفية التالية :

$$A = -4x^2 + 100$$

$$A = (\sqrt{100})^2 - (\sqrt{4}x)^2$$

$$A = (\sqrt{100}\sqrt{4}x) \times (\sqrt{100} - (\sqrt{4}x))$$

$$A = (\sqrt{4}x + \sqrt{100}) \times (10 - 2x)$$

$$A = (\sqrt{4}x + \sqrt{100}) \times (-2x + 10)$$

$$A = (2x + 10) \times (-2x + 10)$$

$$B = 9 - (6x + 2)^2$$

$$B = 3^2 - (6x + 2)^2$$

$$B = (3 + 6x + 2) \times (3 - (6x + 2))$$

$$B = (6x + 3 + 2) \times (3 - 6x - 2)$$

$$B = (6x + 3 + 2) \times (-6x + 3 - 2)$$

$$B = (6x + 5) \times (-6x + 1)$$

$$C = 25x^2 + 20x + 4$$

$$C = (5x)^2 + 2 \times 5x \times 2 + 2^2$$

$$C = (5x + 2)^2$$

$$D = (4x + 2) \times (-10x + 2) + (x + 3) \times (-10x + 2)$$

$$D = (-10x + 2) \times (4x + 2 + x + 3)$$

$$D = (-10x + 2) \times (4x + x + 2 + 3)$$

$$D = (-10x + 2) \times (5x + 5)$$

$$E = (6x + 9)^2 + (6x + 9) \times (-10x - 5)$$

$$E = (6x + 9) \times (6x + 9) + (6x + 9) \times (-10x - 5)$$

$$E = (6x + 9) \times (6x + 9 - 10x - 5)$$

$$E = (6x + 9) \times (6x - 10x + 9 - 5)$$

$$E = (6x + 9) \times (-4x + 4)$$

$$F = -(8x + 4) + (x + 2) \times (8x + 4)$$

$$F = -(8x + 4) \times 1 + (x + 2) \times (8x + 4)$$

$$F = (8x + 4) \times (-1 + x + 2)$$

$$F = (8x + 4) \times (x - 1 + 2)$$

$$F = (8x + 4) \times (x + 1)$$

13 7 7

حلّ العبارات الحرفية التالية :

$$A = -49x^2 + 16$$

$$A = (\sqrt{16})^2 - (\sqrt{49}x)^2$$

$$A = (\sqrt{16}\sqrt{49}x) \times (\sqrt{16} - (\sqrt{49}x))$$

$$A = (\sqrt{49}x + \sqrt{16}) \times (4 - 7x)$$

$$A = (\sqrt{49}x + \sqrt{16}) \times (-7x + 4)$$

$$A = (7x + 4) \times (-7x + 4)$$

$$B = -(-7x + 4) \times (9x - 1) + (5x + 2) \times (9x - 1)$$

$$B = (9x - 1) \times (-(-7x + 4) + 5x + 2)$$

$$B = (9x - 1) \times (7x - 4 + 5x + 2)$$

$$B = (9x - 1) \times (7x + 5x - 4 + 2)$$

$$B = (9x - 1) \times (12x - 2)$$

$$C = 36x^2 - 120x + 100$$

$$C = (6x)^2 - 2 \times 6x \times 10 + 10^2$$

$$C = (6x - 10)^2$$

$$D = (-3x + 6)^2 - 81x^2$$

$$D = (-3x + 6)^2 - (9x)^2$$

$$D = (-3x + 6 + 9x) \times (-3x + 6 - 9x)$$

$$D = (-3x + 9x + 6) \times (-3x - 9x + 6)$$

$$D = (6x + 6) \times (-12x + 6)$$

$$E = (-x + 7) \times (8x + 6) + (-x + 7)^2$$

$$E = (-x + 7) \times (8x + 6) + (-x + 7) \times (-x + 7)$$

$$E = (-x + 7) \times (8x + 6 - x + 7)$$

$$E = (-x + 7) \times (8x - x + 6 + 7)$$

$$E = (-x + 7) \times (7x + 13)$$

$$F = (8x - 4) \times (7x - 7) + 8x - 4$$

$$F = (8x - 4) \times (7x - 7) + (8x - 4) \times 1$$

$$F = (8x - 4) \times (7x - 7 + 1)$$

$$F = (8x - 4) \times (7x - 6)$$

حلّ العبارات الحرفية التالية :

$$A = (3x - 10)^2 - 1$$

$$A = (3x - 10)^2 - 1^2$$

$$A = (3x - 10 + 1) \times (3x - 10 - 1)$$

$$A = (3x - 9) \times (3x - 11)$$

$$B = -16x^2 + 1$$

$$B = (\sqrt{1})^2 - (\sqrt{16}x)^2$$

$$B = (\sqrt{1}\sqrt{16}x) \times (\sqrt{1} - (\sqrt{16}x))$$

$$B = (\sqrt{16}x + \sqrt{1}) \times (1 - 4x)$$

$$B = (\sqrt{16}x + \sqrt{1}) \times (-4x + 1)$$

$$B = (4x + 1) \times (-4x + 1)$$

$$C = (10x + 3) \times (x + 9) + (3x - 5) \times (10x + 3)$$

$$C = (10x + 3) \times (x + 9 + 3x - 5)$$

$$C = (10x + 3) \times (x + 3x + 9 - 5)$$

$$C = (10x + 3) \times (4x + 4)$$

$$D = x^2 + 20x + 100$$

$$D = x^2 + 2 \times x \times 10 + 10^2$$

$$D = (x + 10)^2$$

$$E = -(x + 8) \times (6x + 1) + (6x + 1)^2$$

$$E = -(x + 8) \times (6x + 1) + (6x + 1) \times (6x + 1)$$

$$E = (6x + 1) \times (-(x + 8) + 6x + 1)$$

$$E = (6x + 1) \times (-x - 8 + 6x + 1)$$

$$E = (6x + 1) \times (-x + 6x - 8 + 1)$$

$$E = (6x + 1) \times (5x - 7)$$

$$F = 3x - 3 + (3x - 3) \times (4x + 9)$$

$$F = (3x - 3) \times 1 + (3x - 3) \times (4x + 9)$$

$$F = (3x - 3) \times (1 + 4x + 9)$$

$$F = (3x - 3) \times (4x + 1 + 9)$$

$$F = (3x - 3) \times (4x + 10)$$

حلّ العبارات الحرفية التالية :

$$A = x^2 + 14x + 49$$

$$A = x^2 + 2 \times x \times 7 + 7^2$$

$$A = (x + 7)^2$$

$$B = -25x^2 + 4$$

$$B = (\sqrt{4})^2 - (\sqrt{25}x)^2$$

$$B = (\sqrt{4}\sqrt{25}x) \times (\sqrt{4} - (\sqrt{25}x))$$

$$B = (\sqrt{25}x + \sqrt{4}) \times (2 - 5x)$$

$$B = (\sqrt{25}x + \sqrt{4}) \times (-5x + 2)$$

$$B = (5x + 2) \times (-5x + 2)$$

$$C = -(-10x + 5)^2 + 4x^2$$

$$C = -(-10x + 5)^2 + (2x)^2$$

$$C = (2x - 10x + 5) \times (2x - (-10x + 5))$$

$$C = (-8x + 5) \times (2x + 10x - 5)$$

$$C = (-8x + 5) \times (12x - 5)$$

$$D = (-9x + 5) \times (9x - 1) + (9x - 1) \times (-2x + 3)$$

$$D = (9x - 1) \times (-9x + 5 - 2x + 3)$$

$$D = (9x - 1) \times (-9x - 2x + 5 + 3)$$

$$D = (9x - 1) \times (-11x + 8)$$

$$E = 2x + 9 + (2x + 9) \times (2x + 7)$$

$$E = (2x + 9) \times 1 + (2x + 9) \times (2x + 7)$$

$$E = (2x + 9) \times (1 + 2x + 7)$$

$$E = (2x + 9) \times (2x + 1 + 7)$$

$$E = (2x + 9) \times (2x + 8)$$

$$F = (9x + 2) \times (9x + 10) - (9x + 10)^2$$

$$F = (9x + 2) \times (9x + 10) - (9x + 10) \times (9x + 10)$$

$$F = (9x + 10) \times (9x + 2 - (9x + 10))$$

$$F = (9x + 10) \times (9x + 2 - 9x - 10)$$

$$F = (9x + 10) \times (9x - 9x + 2 - 10)$$

$$F = (9x + 10) \times (-8)$$

حلّ العبارات الحرفية التالية :

$$A = -16 + (-2x - 10)^2$$

$$A = -4^2 + (-2x - 10)^2$$

$$A = (-2x - 10 + 4) \times (-2x - 10 - 4)$$

$$A = (-2x - 6) \times (-2x - 14)$$

$$B = 81x^2 - 90x + 25$$

$$B = (9x)^2 - 2 \times 9x \times 5 + 5^2$$

$$B = (9x - 5)^2$$

$$C = (9x + 4) \times (4x - 3) + (2x - 8) \times (4x - 3)$$

$$C = (4x - 3) \times (9x + 4 + 2x - 8)$$

$$C = (4x - 3) \times (9x + 2x + 4 - 8)$$

$$C = (4x - 3) \times (11x - 4)$$

$$D = -16x^2 + 81$$

$$D = (\sqrt{81})^2 - (\sqrt{16}x)^2$$

$$D = (\sqrt{81}\sqrt{16}x) \times (\sqrt{81} - (\sqrt{16}x))$$

$$D = (\sqrt{16}x + \sqrt{81}) \times (9 - 4x)$$

$$D = (\sqrt{16}x + \sqrt{81}) \times (-4x + 9)$$

$$D = (4x + 9) \times (-4x + 9)$$

$$E = -(5x + 5)^2 + (5x + 5) \times (-9x + 4)$$

$$E = -(5x + 5) \times (5x + 5) + (5x + 5) \times (-9x + 4)$$

$$E = (5x + 5) \times (- (5x + 5) - 9x + 4)$$

$$E = (5x + 5) \times (-5x - 5 - 9x + 4)$$

$$E = (5x + 5) \times (-5x - 9x - 5 + 4)$$

$$E = (5x + 5) \times (-14x - 1)$$

$$F = 5x + 3 + (5x + 3) \times (4x - 6)$$

$$F = (5x + 3) \times 1 + (5x + 3) \times (4x - 6)$$

$$F = (5x + 3) \times (1 + 4x - 6)$$

$$F = (5x + 3) \times (4x + 1 - 6)$$

$$F = (5x + 3) \times (4x - 5)$$

17 ٧ ٨

حلّ العبارات الحرفية التالية :

$$A = (2x - 10) \times (7x - 5) + (4x - 2) \times (7x - 5)$$

$$A = (7x - 5) \times (2x - 10 + 4x - 2)$$

$$A = (7x - 5) \times (2x + 4x - 10 - 2)$$

$$A = (7x - 5) \times (6x - 12)$$

$$B = (x + 7)^2 - 64$$

$$B = (x + 7)^2 - 8^2$$

$$B = (x + 7 + 8) \times (x + 7 - 8)$$

$$B = (x + 15) \times (x - 1)$$

$$C = -81x^2 + 1$$

$$C = (\sqrt{1})^2 - (\sqrt{81}x)^2$$

$$C = (\sqrt{1}\sqrt{81}x) \times (\sqrt{1} - (\sqrt{81}x))$$

$$C = (\sqrt{81}x + \sqrt{1}) \times (1 - 9x)$$

$$C = (\sqrt{81}x + \sqrt{1}) \times (-9x + 1)$$

$$C = (9x + 1) \times (-9x + 1)$$

$$D = 81x^2 + 126x + 49$$

$$D = (9x)^2 + 2 \times 9x \times 7 + 7^2$$

$$D = (9x + 7)^2$$

$$E = -(8x + 3) \times (3x + 10) + 8x + 3$$

$$E = -(8x + 3) \times (3x + 10) + (8x + 3) \times 1$$

$$E = (8x + 3) \times (- (3x + 10) + 1)$$

$$E = (8x + 3) \times (-3x - 10 + 1)$$

$$E = (8x + 3) \times (-3x - 9)$$

$$F = (x + 3) \times (4x - 6) + (x + 3)^2$$

$$F = (x + 3) \times (4x - 6) + (x + 3) \times (x + 3)$$

$$F = (x + 3) \times (4x - 6 + x + 3)$$

$$F = (x + 3) \times (4x + x - 6 + 3)$$

$$F = (x + 3) \times (5x - 3)$$

18 ٧ ٨

حلّ العبارات الحرفية التالية :

$$A = -49x^2 + 4$$

$$A = (\sqrt{4})^2 - (\sqrt{49}x)^2$$

$$A = (\sqrt{4}\sqrt{49}x) \times (\sqrt{4} - (\sqrt{49}x))$$

$$A = (\sqrt{49}x + \sqrt{4}) \times (2 - 7x)$$

$$A = (\sqrt{49}x + \sqrt{4}) \times (-7x + 2)$$

$$A = (7x + 2) \times (-7x + 2)$$

$$B = 81x^2 + 72x + 16$$

$$B = (9x)^2 + 2 \times 9x \times 4 + 4^2$$

$$B = (9x + 4)^2$$

$$C = -(-8x + 6)^2 + 100$$

$$C = -(-8x + 6)^2 + 10^2$$

$$C = (10 - 8x + 6) \times (10 - (-8x + 6))$$

$$C = (-8x + 10 + 6) \times (10 + 8x - 6)$$

$$C = (-8x + 10 + 6) \times (8x + 10 - 6)$$

$$C = (-8x + 16) \times (8x + 4)$$

$$D = (9x - 4) \times (5x - 4) + (5x - 4) \times (7x + 3)$$

$$D = (5x - 4) \times (9x - 4 + 7x + 3)$$

$$D = (5x - 4) \times (9x + 7x - 4 + 3)$$

$$D = (5x - 4) \times (16x - 1)$$

$$E = (7x + 6)^2 - (7x + 9) \times (7x + 6)$$

$$E = (7x + 6) \times (7x + 6) - (7x + 9) \times (7x + 6)$$

$$E = (7x + 6) \times (7x + 6 - (7x + 9))$$

$$E = (7x + 6) \times (7x + 6 - 7x - 9)$$

$$E = (7x + 6) \times (7x - 7x + 6 - 9)$$

$$E = (7x + 6) \times (-3)$$

$$F = (10x - 1) \times (6x + 10) + 6x + 10$$

$$F = (10x - 1) \times (6x + 10) + (6x + 10) \times 1$$

$$F = (6x + 10) \times (10x - 1 + 1)$$

$$F = (6x + 10) \times 10x$$

19

حلّ العبارات الحرفية التالية :

$$A = 25x^2 - 20x + 4$$

$$A = (5x)^2 - 2 \times 5x \times 2 + 2^2$$

$$A = (5x - 2)^2$$

$$B = 100x^2 - (x + 2)^2$$

$$B = (10x)^2 - (x + 2)^2$$

$$B = (10x + x + 2) \times (10x - (x + 2))$$

$$B = (11x + 2) \times (10x - x - 2)$$

$$B = (11x + 2) \times (9x - 2)$$

$$C = (-6x - 4) \times (5x + 10) + (-8x - 9) \times (-6x - 4)$$

$$C = (-6x - 4) \times (5x + 10 - 8x - 9)$$

$$C = (-6x - 4) \times (5x - 8x + 10 - 9)$$

$$C = (-6x - 4) \times (-3x + 1)$$

$$D = 100x^2 - 4$$

$$D = (\sqrt{100}x)^2 - (\sqrt{4})^2$$

$$D = (\sqrt{100}x\sqrt{4}) \times (\sqrt{100}x - (\sqrt{4}))$$

$$D = (10x + 2) \times (10x - 2)$$

$$E = (-7x + 3) \times (10x - 9) + (-7x + 3)^2$$

$$E = (-7x + 3) \times (10x - 9) + (-7x + 3) \times (-7x + 3)$$

$$E = (-7x + 3) \times (10x - 9 - 7x + 3)$$

$$E = (-7x + 3) \times (10x - 7x - 9 + 3)$$

$$E = (-7x + 3) \times (3x - 6)$$

$$F = 2x + 2 - (2x + 2) \times (8x + 4)$$

$$F = (2x + 2) \times 1 - (2x + 2) \times (8x + 4)$$

$$F = (2x + 2) \times (1 - (8x + 4))$$

$$F = (2x + 2) \times (1 - 8x - 4)$$

$$F = (2x + 2) \times (-8x + 1 - 4)$$

$$F = (2x + 2) \times (-8x - 3)$$

20

حلّ العبارات الحرفية التالية :

$$A = 36x^2 + 84x + 49$$

$$A = (6x)^2 + 2 \times 6x \times 7 + 7^2$$

$$A = (6x + 7)^2$$

$$B = 81x^2 - 64$$

$$B = (\sqrt{81}x)^2 - (\sqrt{64})^2$$

$$B = (\sqrt{81}x\sqrt{64}) \times (\sqrt{81}x - (\sqrt{64}))$$

$$B = (9x + 8) \times (9x - 8)$$

$$C = -(x + 10) \times (6x + 3) + (x + 10) \times (7x + 3)$$

$$C = (x + 10) \times (-(6x + 3) + 7x + 3)$$

$$C = (x + 10) \times (-6x - 3 + 7x + 3)$$

$$C = (x + 10) \times (-6x + 7x - 3 + 3)$$

$$C = (x + 10) \times x$$

$$D = 1 - (3x + 4)^2$$

$$D = 1^2 - (3x + 4)^2$$

$$D = (1 + 3x + 4) \times (1 - (3x + 4))$$

$$D = (3x + 1 + 4) \times (1 - 3x - 4)$$

$$D = (3x + 1 + 4) \times (-3x + 1 - 4)$$

$$D = (3x + 5) \times (-3x - 3)$$

$$E = (6x + 3) \times (10x + 6) + (10x + 6)^2$$

$$E = (6x + 3) \times (10x + 6) + (10x + 6) \times (10x + 6)$$

$$E = (10x + 6) \times (6x + 3 + 10x + 6)$$

$$E = (10x + 6) \times (6x + 10x + 3 + 6)$$

$$E = (10x + 6) \times (16x + 9)$$

$$F = (4x + 10) \times (6x - 7) + 4x + 10$$

$$F = (4x + 10) \times (6x - 7) + (4x + 10) \times 1$$

$$F = (4x + 10) \times (6x - 7 + 1)$$

$$F = (4x + 10) \times (6x - 6)$$

21

حلّ العبارات الحرفية التالية :

$$A = 64x^2 - (-2x - 7)^2$$

$$A = (8x)^2 - (-2x - 7)^2$$

$$A = (8x - 2x - 7) \times (8x - (-2x - 7))$$

$$A = (6x - 7) \times (8x + 2x + 7)$$

$$A = (6x - 7) \times (10x + 7)$$

$$B = 64x^2 - 48x + 9$$

$$B = (8x)^2 - 2 \times 8x \times 3 + 3^2$$

$$B = (8x - 3)^2$$

$$C = (9x + 8) \times (10x - 2) - (9x + 8) \times (2x + 7)$$

$$C = (9x + 8) \times (10x - 2 - (2x + 7))$$

$$C = (9x + 8) \times (10x - 2 - 2x - 7)$$

$$C = (9x + 8) \times (10x - 2x - 2 - 7)$$

$$C = (9x + 8) \times (8x - 9)$$

$$D = -16x^2 + 4$$

$$D = (\sqrt{4})^2 - (\sqrt{16}x)^2$$

$$D = (\sqrt{4}\sqrt{16}x) \times (\sqrt{4} - (\sqrt{16}x))$$

$$D = (\sqrt{16}x + \sqrt{4}) \times (2 - 4x)$$

$$D = (\sqrt{16}x + \sqrt{4}) \times (-4x + 2)$$

$$D = (4x + 2) \times (-4x + 2)$$

$$E = (2x - 7) \times (7x - 5) + (7x - 5)^2$$

$$E = (2x - 7) \times (7x - 5) + (7x - 5) \times (7x - 5)$$

$$E = (7x - 5) \times (2x - 7 + 7x - 5)$$

$$E = (7x - 5) \times (2x + 7x - 7 - 5)$$

$$E = (7x - 5) \times (9x - 12)$$

$$F = (4x - 4) \times (10x + 9) + 10x + 9$$

$$F = (4x - 4) \times (10x + 9) + (10x + 9) \times 1$$

$$F = (10x + 9) \times (4x - 4 + 1)$$

$$F = (10x + 9) \times (4x - 3)$$

22

حلّ العبارات الحرفية التالية :

$$A = -64x^2 + 64$$

$$A = (\sqrt{64})^2 - (\sqrt{64}x)^2$$

$$A = (\sqrt{64}\sqrt{64}x) \times (\sqrt{64} - (\sqrt{64}x))$$

$$A = (\sqrt{64}x + \sqrt{64}) \times (8 - 8x)$$

$$A = (\sqrt{64}x + \sqrt{64}) \times (-8x + 8)$$

$$A = (8x + 8) \times (-8x + 8)$$

$$B = (4x + 2) \times (8x + 1) - (9x + 9) \times (8x + 1)$$

$$B = (8x + 1) \times (4x + 2 - (9x + 9))$$

$$B = (8x + 1) \times (4x + 2 - 9x - 9)$$

$$B = (8x + 1) \times (4x - 9x + 2 - 9)$$

$$B = (8x + 1) \times (-5x - 7)$$

$$C = 36x^2 - (7x + 10)^2$$

$$C = (6x)^2 - (7x + 10)^2$$

$$C = (6x + 7x + 10) \times (6x - (7x + 10))$$

$$C = (13x + 10) \times (6x - 7x - 10)$$

$$C = (13x + 10) \times (x - 10)$$

$$D = 100x^2 + 60x + 9$$

$$D = (10x)^2 + 2 \times 10x \times 3 + 3^2$$

$$D = (10x + 3)^2$$

$$E = 3x + 6 + (3x + 6) \times (9x + 8)$$

$$E = (3x + 6) \times 1 + (3x + 6) \times (9x + 8)$$

$$E = (3x + 6) \times (1 + 9x + 8)$$

$$E = (3x + 6) \times (9x + 1 + 8)$$

$$E = (3x + 6) \times (9x + 9)$$

$$F = (2x - 3)^2 + (-9x + 9) \times (2x - 3)$$

$$F = (2x - 3) \times (2x - 3) + (-9x + 9) \times (2x - 3)$$

$$F = (2x - 3) \times (2x - 3 - 9x + 9)$$

$$F = (2x - 3) \times (2x - 9x - 3 + 9)$$

$$F = (2x - 3) \times (-7x + 6)$$

23 ٧ ٨

حلّ العبارات الحرفية التالية :

$$A = 25x^2 - 81$$

$$A = (\sqrt{25}x)^2 - (\sqrt{81})^2$$

$$A = (\sqrt{25}x\sqrt{81}) \times (\sqrt{25}x - (\sqrt{81}))$$

$$A = (5x + 9) \times (5x - 9)$$

$$B = (3x + 3) \times (7x + 9) - (7x + 9) \times (2x + 9)$$

$$B = (7x + 9) \times (3x + 3 - (2x + 9))$$

$$B = (7x + 9) \times (3x + 3 - 2x - 9)$$

$$B = (7x + 9) \times (3x - 2x + 3 - 9)$$

$$B = (7x + 9) \times (x - 6)$$

$$C = (-5x + 10)^2 - 64x^2$$

$$C = (-5x + 10)^2 - (8x)^2$$

$$C = (-5x + 10 + 8x) \times (-5x + 10 - 8x)$$

$$C = (-5x + 8x + 10) \times (-5x - 8x + 10)$$

$$C = (3x + 10) \times (-13x + 10)$$

$$D = 64x^2 - 80x + 25$$

$$D = (8x)^2 - 2 \times 8x \times 5 + 5^2$$

$$D = (8x - 5)^2$$

$$E = (5x + 1) \times (5x + 4) + (5x + 4)^2$$

$$E = (5x + 1) \times (5x + 4) + (5x + 4) \times (5x + 4)$$

$$E = (5x + 4) \times (5x + 1 + 5x + 4)$$

$$E = (5x + 4) \times (5x + 5x + 1 + 4)$$

$$E = (5x + 4) \times (10x + 5)$$

$$F = (2x + 1) \times (4x + 1) + 4x + 1$$

$$F = (2x + 1) \times (4x + 1) + (4x + 1) \times 1$$

$$F = (4x + 1) \times (2x + 1 + 1)$$

$$F = (4x + 1) \times (2x + 2)$$

24 ٧ ٨

حلّ العبارات الحرفية التالية :

$$A = 16x^2 - 81$$

$$A = (\sqrt{16}x)^2 - (\sqrt{81})^2$$

$$A = (\sqrt{16}x\sqrt{81}) \times (\sqrt{16}x - (\sqrt{81}))$$

$$A = (4x + 9) \times (4x - 9)$$

$$B = (5x + 3) \times (-7x + 10) + (-7x + 10) \times (9x + 1)$$

$$B = (-7x + 10) \times (5x + 3 + 9x + 1)$$

$$B = (-7x + 10) \times (5x + 9x + 3 + 1)$$

$$B = (-7x + 10) \times (14x + 4)$$

$$C = (2x - 8)^2 - 16$$

$$C = (2x - 8)^2 - 4^2$$

$$C = (2x - 8 + 4) \times (2x - 8 - 4)$$

$$C = (2x - 4) \times (2x - 12)$$

$$D = 25x^2 + 20x + 4$$

$$D = (5x)^2 + 2 \times 5x \times 2 + 2^2$$

$$D = (5x + 2)^2$$

$$E = -(9x + 9) \times (4x + 1) + 4x + 1$$

$$E = -(9x + 9) \times (4x + 1) + (4x + 1) \times 1$$

$$E = (4x + 1) \times (-9x - 9 + 1)$$

$$E = (4x + 1) \times (-9x - 8)$$

$$E = (4x + 1) \times (-9x - 8)$$

$$F = (5x + 10)^2 + (x + 2) \times (5x + 10)$$

$$F = (5x + 10) \times (5x + 10) + (x + 2) \times (5x + 10)$$

$$F = (5x + 10) \times (5x + 10 + x + 2)$$

$$F = (5x + 10) \times (5x + x + 10 + 2)$$

$$F = (5x + 10) \times (6x + 12)$$