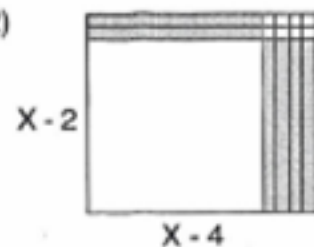
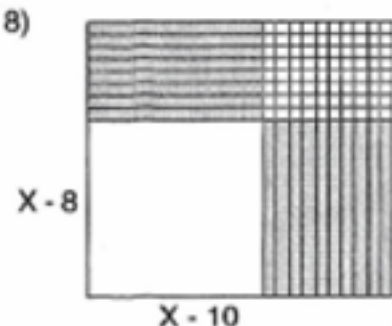


Continue to check by multiplying.

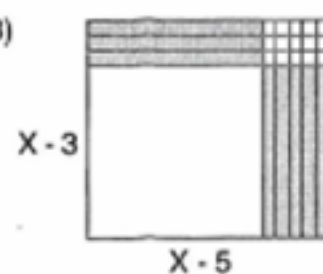
1)  $(X-4)(X-2)$



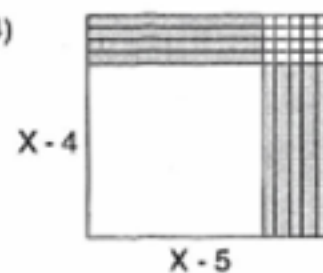
2)  $(X-10)(X-8)$



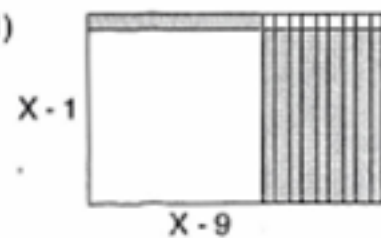
3)  $(X-5)(X-3)$



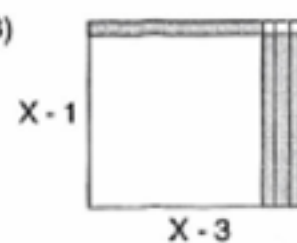
4)  $(X-5)(X-4)$



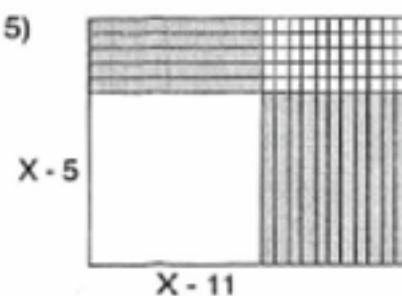
5)  $(X-9)(X-1)$



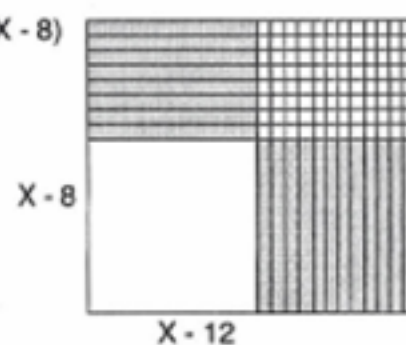
6)  $(X-1)(X-3)$



7)  $(X-11)(X-5)$



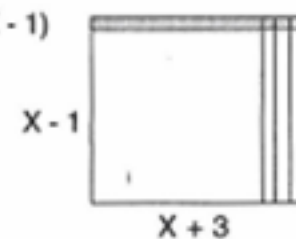
8)  $(X-12)(X-8)$



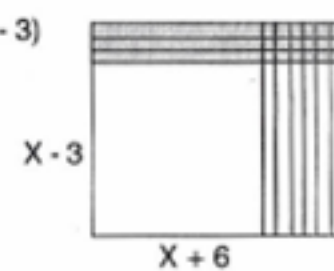
9)  $(X-7)(X-6)$

10)  $(X-8)(X-3)$

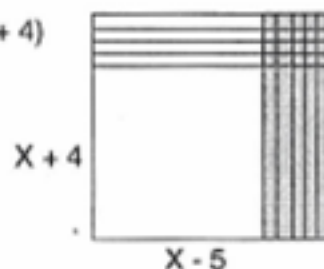
11)  $(X+3)(X-1)$



12)  $(X+6)(X-3)$



13)  $(X-5)(X+4)$

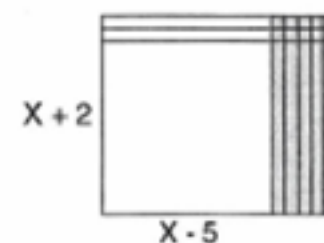


14)  $(X+5)(X-3)$

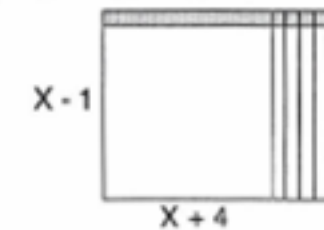
15)  $(5X-1)(X+2)$

16)  $(4X-1)(X+2)$

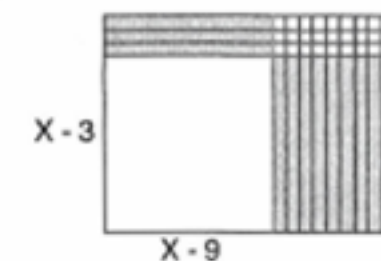
1)  $(X-5)(X+2)$



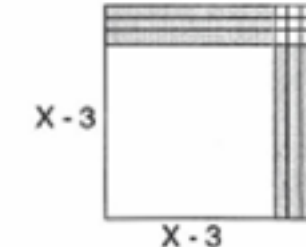
2)  $(X+4)(X-1)$



3)  $X^2 - 12X + 27$



4)  $X^2 - 6X + 9$



5)  $(X+2)(X-1)$

$$\begin{array}{r} X+2 \\ \times X-1 \\ \hline -X-2 \\ X^2+2X \\ \hline X^2+X-2 \end{array}$$

7)  $(X+5)(X-2)$

$$\begin{array}{r} X+5 \\ \times X-2 \\ \hline -2X-10 \\ X^2+5X \\ \hline X^2+3X-10 \end{array}$$

9)  $(2X+1)(X+3)$

$$\begin{array}{r} 2X+1 \\ \times X+3 \\ \hline 6X+3 \\ 2X^2+X \\ \hline 2X^2+7X+3 \end{array}$$

11)  $3^4 \cdot 2^{-3} = 3^{-1}$

12)  $7^{-15}$

13)  $A^5 B^2 A^{-4} A^{-3} B^{-7} = A^{-2} B^{-5}$

14)  $2AB^{-2} + 4B^{-1}A^1 + 3A^2B^{-2}A^{-1}$

$2AB^{-2} + 4B^0A^1 + 3A^1B^{-2}$

$2AB^{-2} + 4A + 3AB^{-2}$

$5AB^{-2} + 4A$

$$\begin{array}{l} 15) \quad 3(-4X) = 2X+7 \\ \quad -12X = 2X+7 \\ \quad \quad X = -1/2 \end{array} \quad \begin{array}{l} Y = -4(-1/2) \\ Y = 2 \end{array}$$

$$\begin{array}{l} 16) \quad 7(N+2) + 2N - 6(N+4) = -1 \\ \quad 7N + 14 + 2N - 6N - 24 = -1 \\ \quad 3N - 10 = -1 \\ \quad N = 3 \end{array} \quad \begin{array}{l} 3, 5, 7 \end{array}$$

17)  $.10D + .05N = .95, \quad D + N = 12$

$$\begin{array}{r} 10D + 5N = 95 \\ -5D - 5N = -60 \\ \hline 5D = 35 \\ D = 7 \end{array} \quad \begin{array}{l} (7) + N = 12 \\ N = 5 \end{array}$$

18)  $\frac{2}{3} \div \frac{5}{6} \times \frac{1}{2} =$

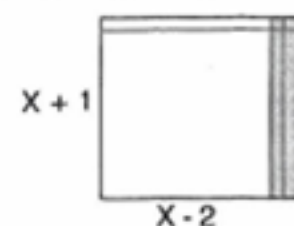
$$\frac{2}{3} \times \frac{6}{5} \times \frac{1}{2} = \frac{2}{5}$$

$$\begin{array}{l} 19) \quad 20X - 2X + 140 = 209 \\ \quad 18X = 69 \\ \quad X = 69/18 = 3 \frac{5}{6} \end{array}$$

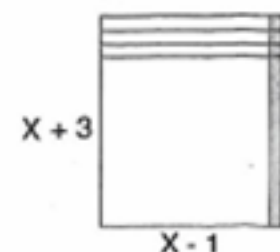
$$\begin{array}{l} 20) \quad 5.5\% = .055 \\ \quad .055 \times 400 = 22 \end{array}$$

## 23D

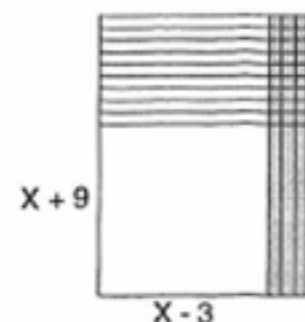
1)  $(X-2)(X+1)$



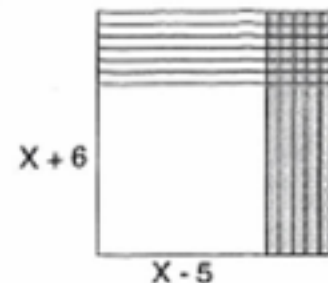
2)  $(X-1)(X+3)$



3)  $X^2 + 6X - 27$



4)  $X^2 + X - 30$



5)  $(X-4)(X+1)$

$$\begin{array}{r} X-4 \\ \times X+1 \\ \hline X-4 \\ X^2-4X \\ \hline X^2-3X-4 \end{array}$$

7)  $(X-3)(X+1)$

$$\begin{array}{r} X-3 \\ \times X+1 \\ \hline X-3 \\ X^2-3X \\ \hline X^2-2X-3 \end{array}$$

9)  $(X-3)(X+2)$

$$\begin{array}{r} X-3 \\ \times X+2 \\ \hline 2X-6 \\ X^2-3X \\ \hline X^2-X-6 \end{array}$$

11)  $10^{2 \times 7} = 10^{14}$

12)  $5^{2 \times 4 \times 3} = 5^{24}$

13)  $D^{-4+3-2-4+5} = D^{-2}$

14)  $B^3 + 3B^3 + 5B^3 = 4B^3 + 5B^3$

$$\begin{array}{l} 15) \quad 2(-4X+5) = 4X-3 \\ \quad -8X+10 = 4X-3 \\ \quad \quad 13 = 12X \\ \quad \quad X = 13/12 \end{array} \quad \begin{array}{l} Y = -4(13/12) + 5 \\ Y = 2/3 \end{array}$$

$$\begin{array}{l} 16) \quad 4(N+1) + 3(N+2) - 8N + 11 = 0 \\ \quad 4N + 4 + 3N + 6 - 8N + 11 = 0 \\ \quad N = 21 \end{array} \quad \begin{array}{l} 21, 22, 23 \end{array}$$

17)  $.10D + .05N = 3.30, \quad D + N = 45$

$$\begin{array}{r} 10D + 5N = 330 \\ -5D - 5N = -225 \\ \hline 5D = 105 \\ D = 21 \end{array} \quad \begin{array}{l} (21) + N = 45 \\ N = 24 \end{array}$$

18)  $\frac{1}{2} \div \frac{1}{2} \times \frac{3}{4} =$

$$\frac{1}{2} \times \frac{2}{1} \times \frac{3}{4} = \frac{3}{4}$$

$$\begin{array}{l} 19) \quad 103X + 20X - 73X = 45 \\ \quad 50X = 45 \\ \quad X = 9/10 \text{ or } .9 \end{array}$$

$$\begin{array}{l} 20) \quad 5.4\% = .054 \\ \quad .054 \times 250 = 13.5 \end{array}$$