

HW Factoring a = 1

Factor each completely.

1) $x^2 - 4x - 60$

$$(x-10)(x+6)$$

2) $r^2 - 10r + 9$

$$(r-1)(r-9)$$

3) $v^2 - 4v - 32$

$$(v-8)(v+4)$$

4) $r^2 + 17r + 70$

$$(r+7)(r+10)$$

5) $x^2 + 2x - 3$

$$(x+3)(x-1)$$

6) $x^2 - 8x - 9$

$$(x-9)(x+1)$$

7) $x^2 + 6x - 16$

$$(x+8)(x-2)$$

8) $x^2 - 10x + 16$

$$(x-8)(x-2)$$

9) $6n^2 - 84n + 288$

$$\begin{aligned} & 6(n^2 - 14n + 48) \\ & 6(n-8)(n-6) \end{aligned}$$

10) $5p^2 - 85p + 350$

$$\begin{aligned} & 5(p^2 - 17p + 70) \\ & 5(p-10)(p-7) \end{aligned}$$

11) $2n^2 + 26n + 60$

$$2(n^2 + 13n + 30)$$

$$2(n+10)(n+3)$$

12) $2p^2 + 6p - 80$

$$\begin{aligned} & 2(p^2 + 3p - 40) \\ & 2(p+8)(p-5) \end{aligned}$$

13) $2n^2 - 12n + 16$

14) $3m^2 + 39m + 120$

$$2(n^2 - 6n + 8)$$

$$\begin{aligned} & 3(m^2 + 13m + 40) \\ & 3(m+8)(m+5) \end{aligned}$$

15) $4a^2 - 48a + 128$

16) $4m^2 + 16m - 84$

$$\begin{aligned} & 4(a^2 - 12a + 32) \\ & 4(a-8)(a-4) \end{aligned}$$

$$\begin{aligned} & 4(m^2 + 4m - 21) \\ & 4(m+7)(m-3) \end{aligned}$$