



Exercise 2G

Question 6:

$$\begin{aligned}x^2 - 21x + 108 \\&= x^2 - 12x - 9x + 108 \\&= x(x - 12) - 9(x - 12) \\&= (x - 12)(x - 9).\end{aligned}$$

Question 7:

$$\begin{aligned}x^2 - 11x - 80 \\&= x^2 - 16x + 5x - 80 \\&= x(x - 16) + 5(x - 16) \\&= (x - 16)(x + 5).\end{aligned}$$

Question 8:

$$\begin{aligned}x^2 - x - 156 \\&= x^2 - 13x + 12x - 156 \\&= x(x - 13) + 12(x - 13) \\&= (x - 13)(x + 12).\end{aligned}$$

Question 9:

$$\begin{aligned}z^2 - 32z - 105 \\&= z^2 - 35z + 3z - 105 \\&= z(z - 35) + 3(z - 35) \\&= (z - 35)(z + 3)\end{aligned}$$

Question 10:

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

***** END *****