

# Roots and Factors 1&2 Solutions

## 1 Roots and Factors 1

1.  $y = x^2 - x - 6$
2.  $y = x^2 - x - 12$
3.  $y = 2x^2 + 12x + 16$
4.  $y = 3x^2 - 18x + 15$
5.  $y = 3x^2 - 5x - 2$
6.  $y = 2x^2 + 5x - 3$
7.  $y = x^2 - 9$
8.  $y = 2x^2 - 4x$
9.  $y = x^2 + 2x + 1$
10.  $y = -x^2 + x + 12$
11.  $y = -2x^2 + 12x - 10$
12.  $y = -x^2 - 4x - 4$
13.  $y = 4x^2 - 24x + 36$
14.  $y = -x^2 - 1x$

## 2 Roots and Factors 2

1.  $y = -3x^2 + 27$
2.  $y = x^3 - 3x^2 - 1x + 3$
3.  $y = 2x^3 + 6x^2 - 12x - 16$
4.  $y = x^3 - 2x^2 - 3x$
5.  $y = 2x^3 - 11x^2 + 12x + 9$
6.  $y = 5x^3 - 20x^2 - 20x + 80$

7.  $y = -3x^3 + 7x^2 + 6x$

8.  $y = -2x^3 - 8x^2 - 8x$

9.  $y = 9x^3 - 60x^2 + 105x - 54$