

$$28) \frac{3+\sqrt{33}}{6}, \frac{3-\sqrt{33}}{6}$$

$$29) -1, -\frac{3}{2}$$

$$30) 2\sqrt{2}, -2\sqrt{2}$$

$$31) 4, -4$$

$$32) 2, -4$$

$$33) 4, -9$$

$$34) \frac{2+3i\sqrt{5}}{7}, \frac{2-3i\sqrt{5}}{7}$$

$$35) 6, -\frac{9}{2}$$

$$36) \frac{5+i\sqrt{143}}{14}, \frac{5-i\sqrt{143}}{14}$$

$$37) \frac{-3+\sqrt{345}}{14}, \frac{-3-\sqrt{345}}{14}$$

$$38) \frac{\sqrt{6}}{2}, -\frac{\sqrt{6}}{2}$$

$$39) \frac{\sqrt{26}}{2}, -\frac{\sqrt{26}}{2}$$

$$40) \frac{-1+\sqrt{141}}{10}, \frac{-1-\sqrt{141}}{10}$$

9.5

Answers - Build Quadratics from Roots

NOTE: There are multiple answers for each problem. Try checking your answers because your answer may also be correct.

$$1) x^2 - 7x + 10 = 0$$

$$2) x^2 - 9x + 18 = 0$$

$$3) x^2 - 22x + 40 = 0$$

$$4) x^2 - 14x + 13 = 0$$

$$5) x^2 - 8x + 16 = 0$$

$$6) x^2 - 9x = 0$$

$$7) x^2 = 0$$

$$8) x^2 + 7x + 10 = 0$$

$$9) x^2 - 7x - 44 = 0$$

$$10) x^2 - 2x - 3 = 0$$

$$11) 16x^2 - 16x + 3 = 0$$

$$12) 56x^2 - 75x + 25 = 0$$

$$13) 6x^2 - 5x + 1 = 0$$

$$14) 6x^2 - 7x + 2 = 0$$

$$15) 7x^2 - 31x + 12 = 0$$

$$16) 9x^2 - 20x + 4 = 0$$

$$17) 18x^2 - 9x - 5 = 0$$

$$18) 6x^2 - 7x - 5 = 0$$

$$19) 9x^2 + 53x - 6 = 0$$

$$20) 5x^2 + 2x = 0$$

$$21) x^2 - 25 = 0$$

$$22) x^2 - 1 = 0$$

$$23) 25x^2 - 1 = 0$$

$$24) x^2 - 7 = 0$$

$$25) x^2 - 11 = 0$$

$$26) x^2 - 12 = 0$$

$$27) 16x^2 - 3 = 0$$

$$28) x^2 + 121 = 0$$

$$29) x^2 + 13 = 0$$

$$30) x^2 + 50 = 0$$

$$31) x^2 - 4x - 2 = 0$$

$$32) x^2 + 6x + 7 = 0$$

$$33) x^2 - 2x + 10 = 0$$

$$34) x^2 + 4x + 20 = 0$$

$$35) x^2 - 12x + 39 = 0$$

$$36) x^2 + 18x + 86 = 0$$

$$37) 4x^2 + 4x - 5 = 0$$

$$38) 9x^2 - 12x + 29 = 0$$

$$39) 64x^2 - 96x + 38 = 0$$

$$40) 4x^2 + 8x + 19 = 0$$

9.6

Answers - Quadratic in Form

$$1) \pm 1, \pm 2$$

$$2) \pm 2, \pm \sqrt{5}$$

$$3) \pm i, \pm 2\sqrt{2}$$

$$4) \pm 5, \pm 2$$

$$5) \pm 1, \pm 7$$

$$6) \pm 3, \pm 1$$

$$7) \pm 3, \pm 4$$

$$8) \pm 6, \pm 2$$