WS 3.4 Practice A ANSWER KEY

1. $x = \frac{-9 \pm \sqrt{65}}{2}$ **2.** $x = -1$ and $x = 2$

3. $x = -3$ **4.** $x = \frac{1}{4}$ and $x = -1$

5. $x = \frac{5}{6} \pm \frac{\sqrt{23}}{6}i$ **6.** $x = 12$

7. $x = \frac{-7}{4} \pm \frac{\sqrt{23}}{4}i$ **8.** $x = \frac{1}{3} \pm \frac{5\sqrt{2}}{6}i$

9. 12; two real solutions **10.** 0; one real solution

11. −207; two imaginary solutions

12. 16; two real solutions

13. $4x^2 - 9x + 10 = 0$ **14.** $-3x^2 + 11x - 2 = 0$

15. $x = \frac{2}{3}$; square root; perfect square

16. $x = 3$ and $x = \frac{1}{4}$; Quadratic Formula; difficult to factor

17. $x = 6 \pm 3\sqrt{3}$; complete the square; even middle term and leading coefficient of 1

18. $x = -2$ and $x = 6$; factoring; easy to factor