

Key

Use the quadratic formula $\left(x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}\right)$ to solve each equation (5 points each)

Show Your Work!:

15. $2x^2 - 9x - 5 = 0$ $\left\{-\frac{1}{2}, 5\right\}$

$a = 2$
 $b = -9$
 $c = -5$

$$\frac{-(-9) \pm \sqrt{(-9)^2 - 4(2)(-5)}}{2(2)}$$

17. $3x^2 - 6x = 24$ $\{-2, 4\}$

$3x^2 - 6x - 24 = 0$

$a = 3$
 $b = -6$
 $c = -24$

$$\frac{-(-6) \pm \sqrt{(-6)^2 - 4(3)(-24)}}{2(3)}$$

16. $-2x^2 - x + 6 = 0$ $\left\{-2, \frac{3}{2}\right\}$

$a = -2$
 $b = -1$
 $c = 6$

$$\frac{-(-1) \pm \sqrt{(-1)^2 - 4(-2)(6)}}{2(-2)}$$

18. $5x^2 - 13x - 6 = 0$ $\left\{-\frac{2}{5}, 3\right\}$

$a = 5$
 $b = -13$
 $c = -6$

$$\frac{-(-13) \pm \sqrt{(-13)^2 - 4(5)(-6)}}{2(5)}$$