Precalc Name_____



# Quadratic formula practice

**Solve each equation with the quadratic formula.**

1) $4k^2 + k - 22 = 0$

2) $-k^2 - 8k + 4 = 0$

3) $-4n^2 - 10n + 36 = 0$

4) $3m^2 + 10m - 8 = 0$

5) $8b^2 - 10b - 16 = 0$

6) $11x^2 - 20 = 0$

7) $9n^2 - 6n - 2 = 3$

8) $11x^2 - x - 12 = 7$

9) $-3v^2 + 2v + 28 = 12$

10) $3x^2 + 5x - 15 = 8$

11) $-2v^2 + 12v = -24$

12) $-11x^2 = 10x - 2$

13) $-x^2 = -16$

14) $-6x^2 + 7x = -23$

15) $-10m^2 - 13m + 13 = -2m + 1 - 12m^2$

16) $2x^2 - 8x - 2 = 4x$

17) $m^2 + 18m + 30 = 7m$

18) $3v^2 + 7v - 34 = -3v - 12$

# Answers to Quadratic formula practice

1) $\left\{\frac{-1+\sqrt{353}}{8}, \frac{-1-\sqrt{353}}{8}\right\}$

2) $\left\{-4-2\sqrt{5}, -4+2\sqrt{5}\right\}$

3) $\left\{-\frac{9}{2}, 2\right\}$

4) $\left\{\frac{2}{3}, -4\right\}$

5) $\left\{\frac{5+3\sqrt{17}}{8}, \frac{5-3\sqrt{17}}{8}\right\}$

6) $\left\{\frac{2\sqrt{55}}{11}, -\frac{2\sqrt{55}}{11}\right\}$

7) $\left\{\frac{1+\sqrt{6}}{3}, \frac{1-\sqrt{6}}{3}\right\}$

8) $\left\{\frac{1+3\sqrt{93}}{22}, \frac{1-3\sqrt{93}}{22}\right\}$

9) $\left\{-2, \frac{8}{3}\right\}$

10) $\left\{\frac{-5+\sqrt{301}}{6}, \frac{-5-\sqrt{301}}{6}\right\}$

11) $\left\{3-\sqrt{21}, 3+\sqrt{21}\right\}$

12) $\left\{\frac{-5-\sqrt{47}}{11}, \frac{-5+\sqrt{47}}{11}\right\}$

13) $\{-4, 4\}$

14) $\left\{\frac{7-\sqrt{601}}{12}, \frac{7+\sqrt{601}}{12}\right\}$

15) $\left\{4, \frac{3}{2}\right\}$

16) $\left\{3+\sqrt{10}, 3-\sqrt{10}\right\}$

17) $\{-5, -6\}$

18) $\left\{\frac{-5+\sqrt{91}}{3}, \frac{-5-\sqrt{91}}{3}\right\}$