

The Quadratic Formula Experienced

Solve each quadratic equation using the quadratic formula. You may use the GED Formula sheet and your TI-30XS calculator.

1) Solve $6x^2 + x - 1 = 0$

3) Solve $12z^2 + 25z + 12 = 0$

2) Solve $20y^2 - 31y - 7 = 0$

4) Solve $3a^2 - 32a - 11 = 0$

5) Solve $2n^2 - 5n + 1 = 0$

7) Solve $7c^2 + 8c - 1 = 0$

6) Solve $3b^2 - 4b - 2 = 0$

8) Solve $f^2 - 15f + 2 = 0$

9) Solve $18m^2 + 39m = -20$

11) Solve $9r^2 + 38r - 15 = 20$

10) Solve $6j^2 - 23j = 55$

12) Solve
 $15k^2 + 16k - 21 = 3k^2 - 3k$

13) Solve $5x^2 - 5x + 1 = 3$

15) Solve $4l^2 = 8l + 3$

14) Solve
 $s^2 + 2s - 9 = -2s^2 + 7s - 10$

16) Solve $3p^2 = 7p$

Answers: 1) $x = \frac{1}{3}, -\frac{1}{2}$ 2) $y = \frac{7}{4}, -\frac{1}{5}$ 3) $z = -\frac{4}{3}, -\frac{3}{4}$ 4) $a = 11, -\frac{1}{3}$ 5) $n = \frac{5 \pm \sqrt{17}}{4}$ 6) $b = \frac{2 \pm \sqrt{10}}{3}$ 7) $c = \frac{-4 \pm \sqrt{23}}{7}$ 8) $f = \frac{15 \pm \sqrt{217}}{2}$ 9) $m = -\frac{5}{6}, -\frac{4}{3}$ 10) $j = \frac{11}{2}, -\frac{5}{3}$ 11) $r = \frac{7}{9}, -5$ 12) $k = -\frac{7}{3}, \frac{3}{4}$ 13) $x = \frac{5 \pm \sqrt{65}}{10}$ 14) $s = \frac{5 \pm \sqrt{13}}{6}$ 15) $l = \frac{2 \pm \sqrt{7}}{2}$ 16) $p = 0, \frac{7}{3}$