

What Do You Call It When Somebody Spends 20 Years in the 24th Row of a Theater?

Solve each equation below using the quadratic formula. Find the solution set at the bottom of the page and print the letter of the exercise above it.

① $2x^2 - 7x + 5 = 0$

① $x^2 - 6x + 4 = 0$

② $2x^2 + x - 6 = 0$

② $t^2 + 4t - 2 = 0$

③ $3n^2 - 2n - 5 = 0$

③ $3x^2 + 10x + 5 = 0$

④ $w^2 + 7w + 4 = 0$

④ $4x^2 - 3x = 1$

⑤ $5x^2 + 3x - 3 = 0$

⑤ $2d^2 + 4 = 5d$

⑥ $6x^2 - x = 2$

⑥ $2x = 7 - x^2$

⑦ $2y^2 + 2 = 9y$

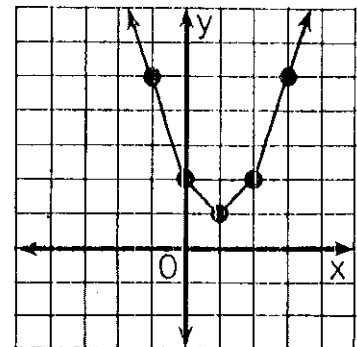
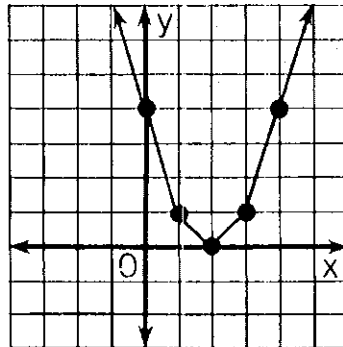
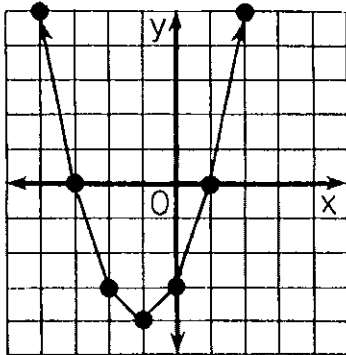
⑦ $y^2 + 9 = -9y$

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| $\{-2 \pm \sqrt{6}\}$ | $\left\{\frac{-3 \pm \sqrt{69}}{10}\right\}$ | $\left\{1, -\frac{1}{4}\right\}$ | $\{3 \pm \sqrt{5}\}$ | $\left\{\frac{3}{2}, -2\right\}$ | $\left\{\frac{2}{3}, -\frac{1}{2}\right\}$ | $\{-1 \pm 3\sqrt{5}\}$ | $\left\{\frac{5}{2}, 1\right\}$ | $\left\{\frac{-5 \pm \sqrt{10}}{3}\right\}$ | $\left\{\frac{-9 \pm \sqrt{30}}{2}\right\}$ | $\{-1 \pm 2\sqrt{2}\}$ | $\left\{2, -\frac{3}{2}\right\}$ | $\left\{\frac{-7 \pm \sqrt{33}}{2}\right\}$ | $\left\{\frac{-9 \pm 3\sqrt{5}}{2}\right\}$ | | | | | |



How Can You Help Control Soil Erosion?

Use the related graph or the discriminant of each equation to determine how many real-number solutions it has. Circle the letter of the correct choice and write this letter in the box containing the exercise number.



- ① $x^2 + 2x - 3 = 0$
 (D) two solutions
 (E) one solution
 (M) no solutions

- ② $x^2 - 4x + 4 = 0$
 (C) two solutions
 (A) one solution
 (W) no solutions

- ③ $x^2 - 2x + 2 = 0$
 (H) two solutions
 (D) one solution
 (O) no solutions

| | two solutions | one solution | no solutions |
|---------------------------------|---------------|--------------|--------------|
| ④ $x^2 + 5x + 4 = 0$ | K | B | G |
| ⑤ $x^2 - 3x = 2$ | U | O | A |
| ⑥ $y^2 + 10y + 25 = 0$ | V | A | I |
| ⑦ $2x^2 = 4x - 3$ | F | C | H |
| ⑧ $4x^2 + 9 = 12x$ | S | P | N |
| ⑨ $-3n^2 + 5n - 2 = 0$ | N | R | S |
| ⑩ $\frac{1}{2}x^2 + 3x + 8 = 0$ | R | P | L |
| ⑪ $\frac{1}{3}t^2 + 3 = 2t$ | Y | B | T |
| | 7 | 3 | 10 |
| | 1 | 5 | 8 |
| | 2 | 11 | 6 |
| | 9 | 4 | |