

Name: \_\_\_\_\_

Score: \_\_\_\_\_ Date: \_\_\_\_\_

## Solving Quadratic Equations With One Variable

Solve using appropriate method.

①  $4x^2 - 100 = 0$

\_\_\_\_\_

②  $8p^2 + 4p - 16 = -p^2$

\_\_\_\_\_

③  $2x^2 + 23 = 14x$

\_\_\_\_\_

④  $z(z - 3) = -7 - 10z$

\_\_\_\_\_

⑤  $2x^2 + 12x = -5$

\_\_\_\_\_

⑥  $3p^2 - 2p + 5 = 10p + 1$

\_\_\_\_\_

⑦  $n^2 + 2n - 48 = -6$

\_\_\_\_\_

⑧  $2x^2 - 4x - 3 = 0$

\_\_\_\_\_

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## Solving Quadratic Equations With One Variable

### Answers

①  $4x^2 - 100 = 0$

$\{5, -5\}$

②  $8p^2 + 4p - 16 = -p^2$

$\left\{ \frac{-2 + 2\sqrt{37}}{9}, \frac{-2 - 2\sqrt{37}}{9} \right\}$

③  $2x^2 + 23 = 14x$

$\left\{ \frac{7 + \sqrt{3}}{2}, \frac{7 - \sqrt{3}}{2} \right\}$

④  $z(z - 3) = -7 - 10z$

$\left\{ \frac{-7 + \sqrt{21}}{2}, \frac{-7 - \sqrt{21}}{2} \right\}$

⑤  $2x^2 + 12x = -5$

$\left\{ \frac{-6 + \sqrt{26}}{2}, \frac{-6 - \sqrt{26}}{2} \right\}$

⑥  $3p^2 - 2p + 5 = 10p + 1$

$\left\{ \frac{6 + 2\sqrt{6}}{3}, \frac{6 - 2\sqrt{6}}{3} \right\}$

⑦  $n^2 + 2n - 48 = -6$

$\{-1 + \sqrt{43}, -1 - \sqrt{43}\}$

⑧  $2x^2 - 4x - 3 = 0$

$\{8, -12\}$