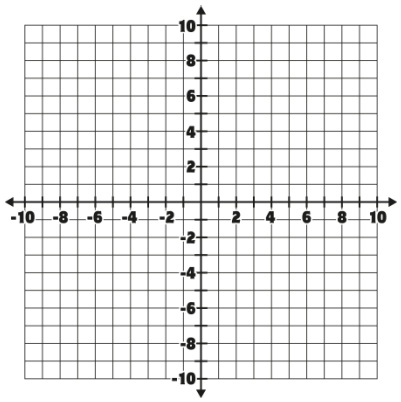
Solving Quadratic Equations by Graphing Homework

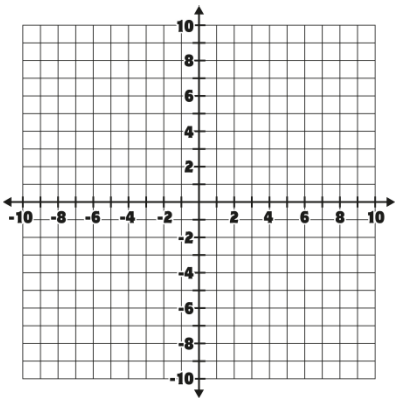
NAME _____

1. Solve each quadratic equation by graphing.

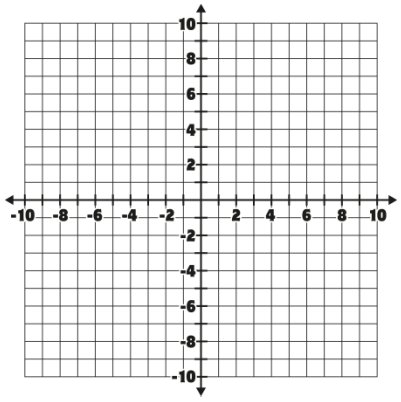
a. $-x^2 + 4 = 0$



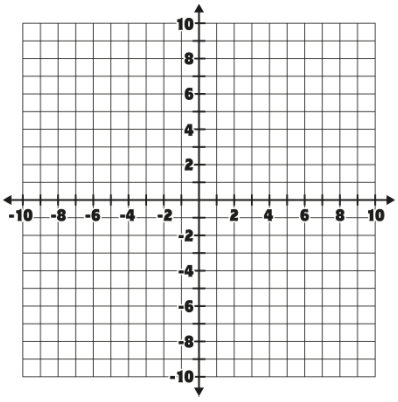
c. $x^2 + x - 2 = 0$



b. $-(x-2)^2 + 1 = 0$

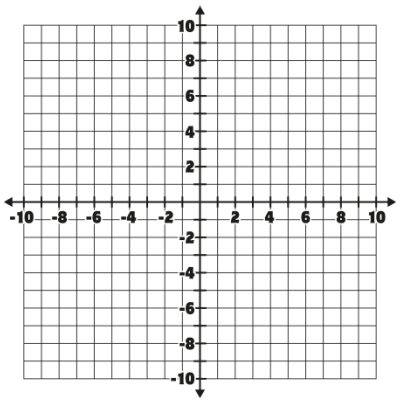


d. $2(x+3)(x-1) = 0$



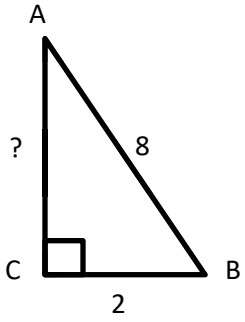
2. Solve $5(x-1) + 3 = -18$

3. Graph $y = 5x - 1$.



4. Find the distance between the points (1, -4) and (0, 2).

5. In the figure below, ΔABC is a right triangle. The length of $\overline{AB}$ is 8 units and the length of $\overline{BC}$ is 2 units. What is the length of $\overline{AC}$?



   a. $2\sqrt{2}$
   b. $2 + \sqrt{15}$
   c. $4\sqrt{2}$
   d. $2\sqrt{15}$
   e. 15

6. Write the sum of $21{,}000$ and $430{,}000$ in scientific notation.

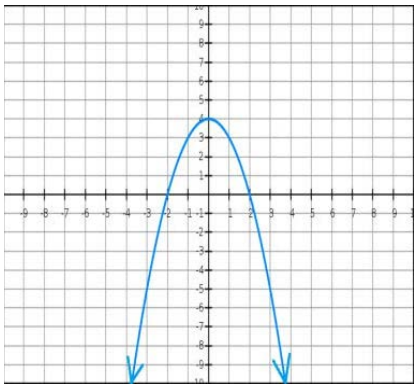
   a. 6.4×10^4
   b. 4.51×10^5
   c. 6.4×10^5
   d. 4.51×10^7
   e. 6.4×10^7

Solving Quadratic Equations by Graphing Homework

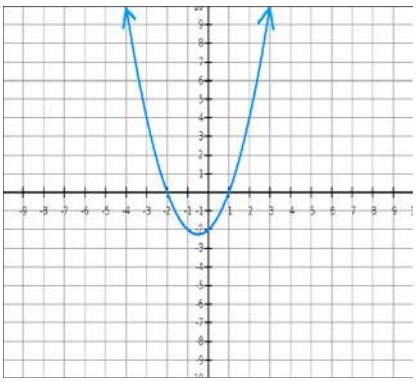
NAME ANSWER KEY

1. Solve each quadratic equation by graphing.

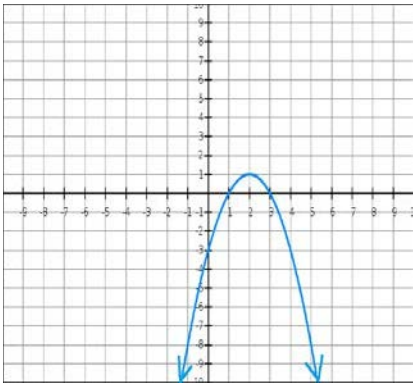
a. $-x^2 + 4 = 0$ $x = -2, 2$



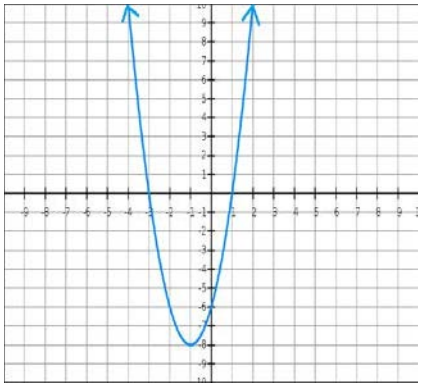
c. $x^2 + x - 2 = 0$ $x = -2, 1$



b. $-(x-2)^2 + 1 = 0$ $x = 1, 3$

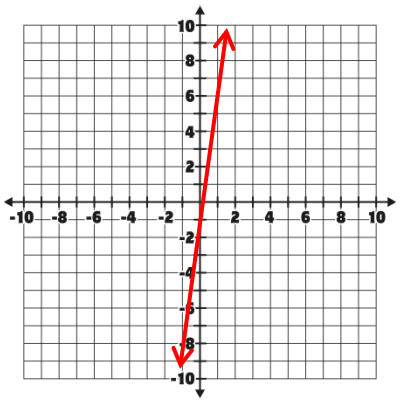


d. $2(x+3)(x-1) = 0$ $x = -3, 1$



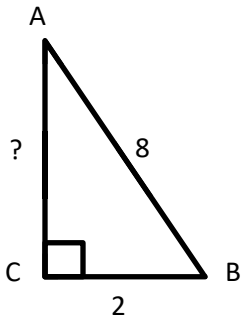
2. Solve $5(x-1) + 3 = -18$ $x = -\frac{16}{5}$

3. Graph $y = 5x - 1$.



4. Find the distance between the points (1, -4) and (0, 2). $d = \sqrt{37}$

5. In the figure below, ΔABC is a right triangle. The length of $\overline{AB}$ is 8 units and the length of $\overline{BC}$ is 2 units. What is the length of $\overline{AC}$?



f. $2\sqrt{2}$
g. $2 + \sqrt{15}$
h. $4\sqrt{2}$
i. $2\sqrt{15}$
j. 15

6. Write the sum of $21{,}000$ and $430{,}000$ in scientific notation.

f. 6.4×10^4
g. 4.51×10^5
h. 6.4×10^5
i. 4.51×10^7
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Special thanks to:
graphsketch.com