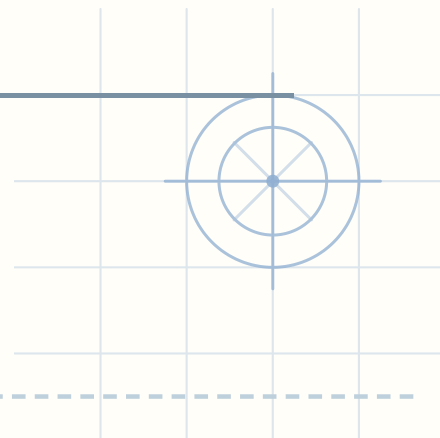


Absolute value equations — Solve absolute-value equations

Name: _____

Date: _____

Solve each equation. Each has two answers.



1 $|2x - 6| = 8$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

2 $|3x - 6| = 18$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

3 $|3x - 3| = 3$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

4 $|x + 5| = 4$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

5 $|x - 6| = 2$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

6 $|3x + 6| = 9$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

7 $|x - 3| = 8$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

8 $|x - 4| = 8$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

9 $|3x - 12| = 3$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$

10 $|x + 2| = 8$ $x = \underline{\hspace{1cm}}$ or $x = \underline{\hspace{1cm}}$



Absolute value equations · Solve absolute-value equations

— Answer key

1. $|2x - 6| = 8 \rightarrow x = -1$ or $x = 7$

2. $|3x - 6| = 18 \rightarrow x = -4$ or $x = 8$

3. $|3x - 3| = 3 \rightarrow x = 0$ or $x = 2$

4. $|x + 5| = 4 \rightarrow x = -9$ or $x = -1$

5. $|x - 6| = 2 \rightarrow x = 4$ or $x = 8$

6. $|3x + 6| = 9 \rightarrow x = -5$ or $x = 1$

7. $|x - 3| = 8 \rightarrow x = -5$ or $x = 11$

8. $|x - 4| = 8 \rightarrow x = -4$ or $x = 12$

9. $|3x - 12| = 3 \rightarrow x = 3$ or $x = 5$

10. $|x + 2| = 8 \rightarrow x = -10$ or $x = 6$

