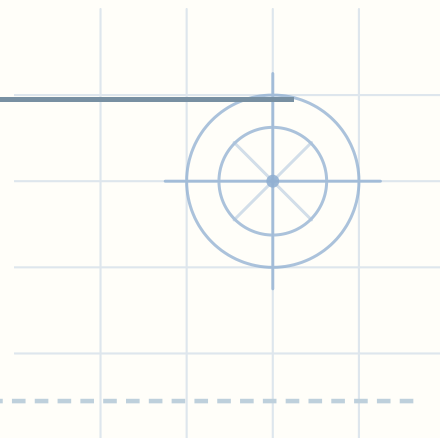


Absolute value equations — Solve $|ax + b| = c$

Name: _____

Date: _____

Solve each equation. Each has two answers.



1 $|2x - 12| = 4$ $x = \underline{\quad}$ or $x = \underline{\quad}$

2 $|2x - 4| = 2$ $x = \underline{\quad}$ or $x = \underline{\quad}$

3 $|2x + 4| = 4$ $x = \underline{\quad}$ or $x = \underline{\quad}$

4 $|2x| = 8$ $x = \underline{\quad}$ or $x = \underline{\quad}$

5 $|3x + 9| = 6$ $x = \underline{\quad}$ or $x = \underline{\quad}$

6 $|2x| = 4$ $x = \underline{\quad}$ or $x = \underline{\quad}$

7 $|2x - 6| = 10$ $x = \underline{\quad}$ or $x = \underline{\quad}$

8 $|3x - 21| = 3$ $x = \underline{\quad}$ or $x = \underline{\quad}$

9 $|3x - 3| = 12$ $x = \underline{\quad}$ or $x = \underline{\quad}$

10 $|2x - 4| = 4$ $x = \underline{\quad}$ or $x = \underline{\quad}$



Absolute value equations · Solve $|ax + b| = c$ — Answer key

1. $|2x - 12| = 4 \rightarrow x = 4$ or $x = 8$

2. $|2x - 4| = 2 \rightarrow x = 1$ or $x = 3$

3. $|2x + 4| = 4 \rightarrow x = -4$ or $x = 0$

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

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

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

7. $|2x - 6| = 10 \rightarrow x = -2$ or $x = 8$

8. $|3x - 21| = 3 \rightarrow x = 6$ or $x = 8$

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

10. $|2x - 4| = 4 \rightarrow x = 0$ or $x = 4$

