

Absolute Value Equations Quiz Answer Key

1. Solve: $|x+3|=4$

- a) $x=1, -7$
- b) $x=1$
- c) $x=-7$
- d) There are no solutions

2. Solve for x : $|x+2|-5=-2$

- a) $x=-5, -1$
- b) $x=1, 5$
- c) $x=-5, 1$
- d) There are no solutions

3. Find the solution for $|x-8|=-4$

- a) $x=4$
- b) $x=12$
- c) $x=4, 12$
- d) There are no solutions

4. The solutions for: $\left|\frac{x}{2}-4\right|=6$ are -4 and 20

- a) *True*
- b) *False*

5. Find the solution for $2|x-2|=8$

- a) $x=-2, -6$
- b) $x=-2, 6$
- c) $x=-6, 2$
- d) There are no solutions

6. Find the solutions for $5|x+4|-25=0$

- a) $x=-9, -1$
- b) $x=1, 9$
- c) $x=-1, 9$

d) $x = -9, 1$

7. Solve: $|2x + 1| = 3$

a) $x = -1, 2$

b) $x = -2, -1$

c) $x = 1, 2$

d) $x = -2, 1$

8. Determine the solutions for $2|3x - 4| = 6$

a) $x = \frac{1}{3}, 2\frac{1}{3}$

b) $x = 1\frac{1}{3}, 3\frac{1}{3}$

c) $x = \frac{3}{7}, 1\frac{1}{3}$

d) There are no solutions

9. Solve: $4|6x + 1| - 8 = 12$

a) $x = -\frac{1}{6}, -2$

b) $x = \frac{1}{6}, \frac{1}{3}$

c) $x = -1, \frac{2}{3}$

d) There are no solutions

10. Solve: $|x + 2| = 3x + 1$

a) $x = -\frac{3}{4}, \frac{1}{2}$

b) $x = \frac{1}{2}, \frac{2}{5}$

c) $x = -\frac{2}{3}, -\frac{1}{2}$

d) There are no solutions