Symbolab

Absolute Equations

Multiple Absolutes

1. $4|x-1|-3=-5|x+1|+10$

2. $9|x-2|+10=3|x-9|+1$

3. $6|x+3|-7=-6|x+2|+8$

4. $4|x-3|+6=4|x-4|+3$

5. $6|x+4|-4=4|x-4|+6$

6. $2|a-10|+7=6|a+3|-5$

7. $2|a-10|-10=3|a+1|+10$

8. $3|x+2|+5=2|x-5|+4$

9. $6|x-1|-7=7|x+2|+3$

10. $|x-7|-8=1|x+7|+8$

Symbolab

Answers

Absolute Equations

Multiple Absolutes

1. $x = -\frac{14}{9}$ or $x = \frac{4}{3}$

2. $x = 0$ or $x = 3$

3. $x = -\frac{15}{4}$ or $x = -\frac{5}{4}$

4. $x = \frac{25}{8}$

5. $x = -25$ or $x = \frac{1}{5}$

6. $a = -\frac{25}{2}$ or $a = \frac{7}{4}$

7. $a = -3$ or $a = -\frac{3}{5}$

8. $x = -15$ or $x = \frac{3}{5}$

9. $x = -10$ or $x = -\frac{18}{13}$

10. No Solution for $x \in \mathbb{R}$