Name _____

Absolute Value

Find the absolute value of each of the following equations.

| x - 5 | = 8

The given equation is | x - 5 | = 8
When we remove the absolute value sign on one side of the equation. We then get + sign on the other side. x-5= ± 8
This results in two equations, which we solve separately.

x - 5 = +8
x = +8 +5
x = +13

x - 5 = -8
x = -8 +5
x = -3

Therefore, the solutions of the given equation are x = 13, x = -3

1) $\lvert x - 3 \rvert = 6$ 9, -3	2) $\lvert x + 5 \rvert = 5$ 0, -10	3) $\lvert 2x \rvert = 8$ 4, -4
4) $5 + \lvert x - 2 \rvert = 4$ 1, -7	5) $\lvert 5x \rvert = 15$ 3, -3	6) $\lvert 2x - 10 \rvert = 5$ 15/2, -15/2
7) $\lvert 7x \rvert = 49$ 7, -7	8) $\lvert 4x + 2 \rvert = 10$ 2, -3	9) $\lvert 6x \rvert = 18$ 3, -3