

Solving Equations Review #1

Solve each equation. Justify each step.

1) $-5x = -35$

2) $v + 10 = 18$

3) $\frac{x}{6} = -3$

4) $x - 9 = -8$

5) $4 + \frac{x}{2} = 9$

6) $-4m - 2 = 38$

7) $4x + 5x = 18$

8) $37 = 4m + 4 - m$

9) $28 = 4(1 + 3m)$

10) $3(x + 1) + 6 = 21$

$$11) 3n + 19 = 5n + 1$$

$$12) 12y + 6 = 6(2y + 3)$$

Solve each equation if possible. Show all steps, but you do not need to justify steps.

$$13) |x| = 7$$

$$14) |v| = -9$$

$$15) \left| \frac{v}{9} \right| = 5$$

$$16) |p + 6| - 9 = 2$$

Solve each equation for the indicated variable.

$$17) 8x + 2y = 10 \quad \text{for } y$$

$$18) 2y - 18x = -26 \quad \text{for } y$$

$$19) d = rt \quad \text{for } t$$

$$20) 2m + 4a = 5 \quad \text{for } a$$