

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

WS 19.1 - Equations with No Solution or Infinitely Many Solutions

Solve each equation.

<p>1. $2x + 3 = 2x + 7$</p> <p>$-2x \quad -2x$</p> <p>$3 \neq 7$</p> <p>No solution</p>	<p>2. $3(m - 5) = 4m - 15 - m$</p>	<p>3. $-2(x + 3) = -2x - 6$</p> <p>$-2x - 6 = -2x - 6$</p> <p>$+2x \quad +2x$</p> <p>$-6 = -6$</p> <p>All real numbers</p>
<p>4. $4(2j - 1) = 3j - j + 4$</p>	<p>5. $2(y + 2) + 3y = 3(y + 1) + 2y + 7$</p> <p>$2y + 4 + 3y = 3y + 3 + 2y + 7$</p> <p>$5y + 4 = 5y + 10$</p> <p>$-5y \quad -5y$</p> <p>$4 \neq 10$</p> <p>No solution</p>	
<p>6. $-(4z + 7) = -2 + 4z$</p>	<p>7. $-21 - 8a = -1 + 6(4 - 5a)$</p> <p>$-21 - 8a = -1 + 24 - 30a$</p> <p>$-21 - 8a = 23 - 30a$</p> <p>$+30a \quad +30a$</p> <p>$-21 + 22a = 23$</p> <p>$+21 \quad +21$</p> <p>$\frac{22a}{22} = \frac{44}{22}$</p> <p>$a = 2$</p>	

8. $-(m - 6) - 8 = -(1 + m)$

9. $8(k - 6) + 58 = 2(4k + 5)$

$$8k - 48 + 58 = 8k + 10$$

$$8k + 10 = 8k + 10$$

$-8k \qquad -8k$

$$10 = 10$$

All real numbers

10. $-7r - 12 = -4r + 3(-4 - r)$

11. $4(-4 - 8m) + 28m + 4m = -272$

$$-16 - 32m + 28m + 4m = -272$$

$$-16 \neq -272$$

No solution

12. $5(-2w + 3) - 4w + 5 = 2(3w + 1) - 20w + 18$

13. $93 + 12v = 3(4v - 1) + 96$

$$93 + 12v = 12v - 3 + 96$$

$$93 + 12v = 12v + 93$$

$-12v \quad -12v$

$$93 = 93$$

All real numbers