

**Equations 1 Review Worksheet**

Exercises 1-6 are multiple choice. Please circle the letter of the best answer.

1. Evaluate:  $-|3 - 8| + |-5|$

(a) 10

(b) -5

(c) 0

(d) -10

2. Evaluate:  $(-5)(-2) + (-3)(-8)$

(a) 34

(b) -34

(c) 14

(d) -14

3. Simplify:  $-2A + 5B + 4A - B$

(a)  $-2A + 4B$

(b)  $6A + 6B$

(c)  $-2A - 4B$

(d)  $2A + 4B$

4. Simplify:  $-0.5(8x - 4y) + 3(3x - 2y)$

(a)  $13x - 8y$

(b)  $-5x + 4y$

(c)  $-5x - 4y$

(d)  $5x - 4y$

5. Solve:  $-3(x - 4) = -x - 5 - 9x$

(a)  $x = \frac{17}{7}$

(b)  $x = -\frac{17}{7}$

(c)  $x = \frac{7}{17}$

(d)  $x = -\frac{7}{17}$

6. Simplify:  $\frac{7}{2}x + 1 = \frac{1}{4}x - 1$

(a)  $x = \frac{7}{2}$

(b)  $x = \frac{8}{13}$

(c)  $x = -\frac{8}{13}$

(d)  $x = -\frac{2}{7}$

Simplify each expression and solve each equation. Remember to show your work.

7.  $\frac{3}{2}x = 12$

8.  $0.5(6x - 2) = 3(3x - 2)$

9.  $-24x + 8 - 4x$

10.  $3(x - 5) = -15$

11.  $2(x + 3) - 3(x - 1)$

12.  $-3x = 5x - 4$

13.  $8x + 6x - 4$

14.  $7n + 6 + 4n - 9$

15.  $-3 + 4x = -20$

16.  $\frac{1}{2}x = 8x + 12$

17.  $6x - 20x$

18.  $2x + 4 + 6(x - 8)$

19.  $4(3x + 2) = 18x - 14$

20.  $6(x + 5) - 2(x - 3)$

21.  $-3x - 1 + 5(x + 8)$

$$22. -5(2x - 4) = \frac{1}{2}(6x + 2)$$

$$23. \frac{1}{2}w = -10 + \frac{2}{3}w$$

$$24. 2(x - 3) - 5x + 1$$

$$25. \frac{1}{20} \left( x + \frac{17}{6} \right)$$

$$26. \frac{1}{20} - x = \frac{17}{6}$$

$$27. x - \frac{1}{20} = \frac{17}{6}x$$

$$28. \frac{15}{7} \left( x - \frac{19}{10} \right) + \frac{4}{9}(8x + 2)$$

$$29. 6p - (5p + 8) - 5 - 2(p + 12)$$