

# NWEA Test Day HW

Simplify each expression by applying the distributive property.

(a)  $3(x-2)$

(b)  $5(a-b)$

(c)  $-7(y-8)$

(d)  $-6(x+7)$

Simplify each expression by using the distributive property and combining like terms where possible.

(a)  $3(x+6)-2$

(b)  $7y+2(y-5)+y$

(c)  $-5(x-2)-2x+6$

## Guided Practice

Simplify each expression by combining like terms [if possible].

1.  $32y+17y$

2.  $8.3p^2+4.8p$

3.  $-22n+18n-15$

4.  $3x+8x^2-11x$

5.  $-6+7m+8$

6.  $9x^2-4x-12x-15x^2$

Simplify each expression by using the distributive property and combining like terms where possible.

7.  $-3(8x+4)+\frac{1}{2}(6x-24)$

8.  $4(x+9)+5x$

9.  $-2(y-6)+12$

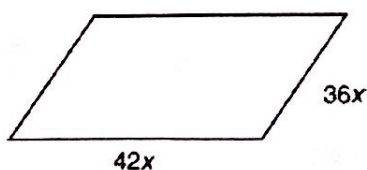
10.  $\frac{1}{3}(3x-9)+13x$

11.  $5x-\frac{1}{4}(8x^2-20x)$

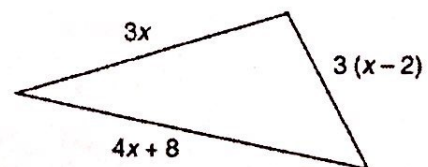
12.  $-4(3d-1)+2(7d+9)$

Write an expression for the perimeter of the figures shown below.

13.



14.



## Solving One-Step Equations Review & Practice

**One Step Addition Example**

The Opposite of Addition is Subtraction

$$\begin{array}{r} y + 14 = 20 \\ -14 \quad -14 \\ \hline y = 6 \checkmark \end{array}$$

The value which makes the equation true is 6

**ONE STEP SUBTRACTION EXAMPLE**

The Opposite of Subtraction is Addition

$$\begin{array}{r} x - 120 = 80 \\ +120 \quad +120 \\ \hline x = 200 \checkmark \end{array}$$

The value which makes the equation true is 200

**Multiplication Example**

The Opposite of Multiplication is Division

$$\begin{array}{r} 3n = 12 \\ \frac{3n}{3} = \frac{12}{3} \quad \begin{array}{l} 3/3 \text{ cancels down} \\ \text{to become } 1/1 = 1 \end{array} \\ \hline n = 4 \checkmark \quad \begin{array}{l} 1n \text{ is simply "n"} \end{array} \end{array}$$

The value which makes the equation true is 4.

**One Step Division Example**

The Opposite of Division is Multiplication

$$\begin{array}{r} \frac{k}{2} = 16 \\ \frac{k}{2} \times 2 = 16 \times 2 \quad \begin{array}{l} k \text{ is divided by } 2, \\ \text{so we need to multiply} \\ \text{both sides by } 2 \end{array} \\ \hline k = 32 \checkmark \quad \begin{array}{l} 2/2 \text{ cancels down} \\ \text{to become } 1/1 = 1 \\ 1k \text{ is simply "k"} \end{array} \end{array}$$

The value which makes the equation true is 32.



Solve each equation for the indicated variable.

1.  $x - (-3) = 17$

2.  $41 = w - 4$

3.  $k - 8 = -19$

4.  $t - 5 = 12$

5.  $-2 + d = 97$

6.  $-7 + x = -18$

7.  $\frac{5}{8} = t - \frac{3}{8}$

8.  $-\frac{3}{7} + c = -\frac{3}{7}$

9.  $x - \frac{4}{7} = \frac{3}{7}$

10.  $\frac{k}{9} = -8$

11.  $\frac{x}{-12} = -4$

12.  $-16 = \frac{t}{-2}$

13.  $24x = -12$

14.  $-y = -145$

15.  $-7m = -49$