

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Aim: How can we add algebraic expressions?**

**DO NOW:**

**State the coefficient of each term in each expression.**

a.)  $5x$

b.)  $-8x - 10$

c.)  $3x + 6y$

d.)  $x + 2y$

**Complete the table.**

Expression	# of Terms	State the Terms
$5m - 3n + 5$		
$-b + 4$		
$abc$		

**Like terms:** \_\_\_\_\_

**State whether the two terms are like-terms.**

1.)  $4x$  and  $3x$

2.)  $4x$  and  $6y$

3.)  $9xy$  and  $3x$

4.)  $x^2$  and  $x^3$

5.)  $4x^2y^4$  and  $3x^2y^4$

6.)  $x$  and  $7x$

**Combining Like Terms:** \_\_\_\_\_

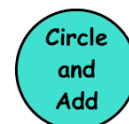
1.) \_\_\_\_\_

2.) \_\_\_\_\_

**Examples:**  $x + 2x =$

$4y - 2y =$

$7x + 2y =$



**ONLY LIKE-TERMS CAN BE COMBINED!**

$x + 7y - 2x + 10y + 8$

**Simplify the expression by combining like-terms.**

1.)  $x + 6x$

11.)  $5.3x + 4 + (-2.1)x + 6$

2.)  $-4x^2 + 8x^2$

12.)  $-5 + x + 2 - 8x$

3.)  $9y^2 - 5y^2$

13.)  $2x + 2 + 2x + 2$

4.)  $x - x$

14.)  $-6.34x - 4 + 2.11x - 1 + 5$

5.)  $-3x - 10x$

15.)  $5x - 4y$

6.)  $7 + \frac{1}{2}x + x$

16.)  $2x + 3y - 5x - y$

7.)  $2.5n + 9.9 - 3n$

17.)  $-4x + 2 - 3y + 7 + 2x - 2y$

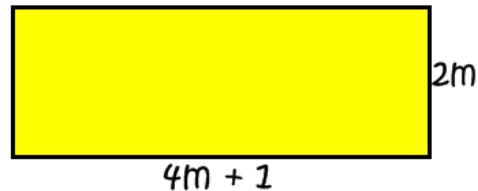
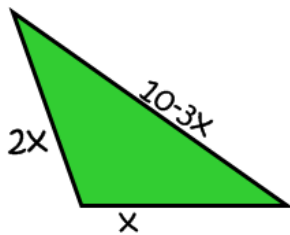
8.)  $\frac{-7}{2}m + \frac{-36}{5} - \frac{1}{2}m$

18.)  $1 + x - 1 + y + 1 + z - 1$

9.)  $3\frac{1}{4}x + \frac{1}{8} - \frac{1}{2}x$

10.)  $-7.6s - 12s + 30$

19.) Express the perimeter of each shape as a simplified algebraic expression.





1. \_\_\_\_\_ can be combined  
when simplifying expression.

2. We combine like-terms by \_\_\_\_\_  
the coefficients.

3. Combine the following:

$$3x + 6y + 9x + 2y + x^2 + y^2$$

Extra Practice (If Time...)

1.)  $-6k + 7k$

6.)  $-4x - 10x$

2.)  $n - 10 + 9n - 3$

7.)  $-v + 12v$

3.)  $11r - 12r$

10.)  $4p + 2p$

4.)  $-8x - 11x$

11.)  $12r + 5 + 3r - 5$

5.)  $12r - 8 - 12$