Objectives: The students will be able to use the distributive property and combine like terms to simplify variable expressions.

# Distributive Property with Combining Like Terms

We will complete one or two problems from each section for notes.

**Use Distributive Property to simplify each expression.**

1) $7(1-8n)$

2) $-8(b+3)$

3) $-6(9-9v)$

4) $-(3x+9)$

$-3x+9$

5) $-9(n+6)$

6) $-10(a+2)$

7) $(5k-10)\cdot -9$

8) $-4(4+3p)$

**Use Distributive Property AND Combining Like Terms to simplify each expression. problems.**

9) $-6(x+2)-2$

10) $4n-(7-6n)$

11) $-3+7(-3+6v)$

$-3+21+42v$

$42v+18$

12) $-5(a-6)+2a$

**Use Distributive Property AND Combining Like terms to simplify each expression.**

13) $7(5n-8)+6(4+6n)$

14) $-(3a+2)-3(5a+7)$

15) $-5(1+2k)+8(-4+5k)$

$-5+-10k+32+-40k$

$-50k+27$

16) $5(-3p+7)+5(p-1)$

17) $-5(x+2)+5(x-5)$

18) $-4(1-8n)-4(8n+4)$

**Use Distributive Property AND Combining Like terms to simplify each expression.**

19) $9(m+8)+11(3m+4)$

20) $11(8r+3)-2(-9+6r)$

21) $7(-12x-3)+10(6x+7)$

22) $-9(1-10n)-2(3n+9)$

23) $\frac{1}{3}(9x-12)-(-x+7)$

24) $2(-f+10)-\frac{3}{5}(10f-5)$

25) $\frac{-2}{9}(27x+18)+\frac{5}{6}(12x+36)$

Multiply by -2 and divide by 9

Multiply by 5 and divide by 6

$-6x+4+10x+30$

$4x+34$

26) $\frac{1}{8}(-16c+64)-\frac{4}{7}(42c-63)$

27) $\frac{-11}{5}(40r-15)-\frac{2}{9}(-81+54r)$

28) $-\frac{9}{8}(8-80n)-\frac{2}{7}(21n+63)$