

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) $-6(9 - 9v)$

$$\textcircled{4} - (3x + 9)$$

$$\boxed{-3x + 9}$$

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

$$\textcircled{11} -3 + 7(-3 + 6v)$$

$$-3 + 21 + 42v$$

$$\boxed{42v + 18}$$

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

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

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

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

$$\textcircled{15} -5(1 + 2k) + 8(-4 + 5k)$$

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

$$\boxed{-50k + 27}$$

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

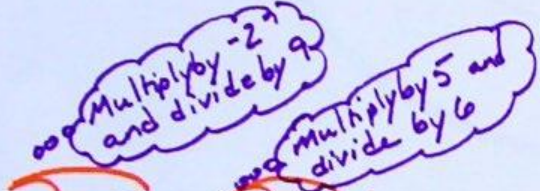
20) $11(8r + 3) - 2(-9 + 6r)$

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

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

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

$$\boxed{4x + 34}$$

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

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