

The Distributive Property and
Combining Like Terms Worksheet #1

Name: _____

Date: _____ Pd: _____

The Distributive Property

$$a(b+c) = ab+ac$$

$$(d-e)f = df - ef$$

Example 1: $4(2x+3)$
 $4(2x)+4(3)$
 $8x+12$

Example 2: $(m-3)m$
 $m(m)-3(m)$
 m^2-3m

Use the distributive property to rewrite the expression as a sum or difference of terms.
Circle your final answer in standard form. (DESCENDING ORDER)

1. $3(h+1)$

2. $(9-s)5$

3. $x(4+m)$

4. $-6(x-11)$

5. $1.5(8x-6y)$

6. $(a-5)2.7$

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

8. $(3x-18)\frac{2}{3}$

9. $y(3+y)$

10. $(3+y)y$

11. $2\frac{1}{2}(2-4x)$

12. $2s(4s+4)$

Like terms must have the same variables with the same exponents.
To add **like terms**, add their **coefficients**.

Like Terms $\rightarrow 4x, -1.5x, \frac{1}{3}x$

Not Like Terms $\rightarrow 4x, 4x^2, 2xy$

Example: $x^2 + 2y + 3x^2 + 5y$
 $x^2 + 3x^2 + 2y + 5y$
 $4x^2 + 7y$

(Reorder using the Commutative Property)
(Add Coefficients)

Simplify by combining the **like terms** and write your answer in standard form.

13. $x+3+3x+10$

14. $14+y^2+7y+10$

15. $5xy+2x+5xy$

16. $4n+2.8n+7.8m$

17. $4-2\frac{1}{2}q-5+5q$

18. $4n^2-2x+2nx$

19. $2.5x-1\frac{2}{5}x+\frac{3}{4}x-(-x^2)$

20. $xy-y^2+\frac{3}{5}y^2+(-xy)+z^2$