

HW 3-3

Distributive Property
& Simplifying Like Terms

Int 1

Uni

Use the Distributive Property to rewrite each expression.

A. $(2 + g)8$

$8g + 16$

D. $\frac{1}{2}(2m + 1)$

$m + \frac{1}{2}$

F. $-3.6(2b - 3a)$

B. $4(h - 5g)$

E. $6x(y - z)$

G. $-(8m + 3n)$

C. $-7(5 - n)$

$7n - 35$

H. $\frac{3}{8}(24n - 32)$

$9n - 12$

Simplify each expression using the Distributive Property. Show your work.

1. $5(x + 6)$

$5x + 30$

5. $\frac{4}{7}(21w - 14r)$

$12w - 8r$

8. $-8(y + 2z)$

2. $3(4g + 6h)$

6. $10.4(7a - 6b)$

9. $-6(3f + 1)$

$-18f - 6$

3. $2(5r + 3)$

$10r + 6$

7. $-\frac{1}{3}(2y + 6)$

$-\frac{2}{3}y - 2$

10. $-6.8(8w - 4)$

4. $8k(3m - 6)$

11. $-2y(p - 6)$

$-2yp + 12$

$$12. -(3c-d)$$

$$19. (-15+b)\frac{2}{5}$$

$$\frac{2}{5}b - 6$$

$$26. (6+d)(-6)$$

$$13. \frac{3}{4}(8h+4)$$

$$6h + 3$$

$$20. -(18r-11)$$

$$27. (4c+2d)(-2)$$

$$-8c - 4d$$

$$14. -2(3t-6)$$

$$21. -2(3f-5g)$$

$$-6f + 10g$$

$$28. 5+2(3a+6)$$

$$15. 5c(a-b)$$

$$5ca - 5cb$$

$$22. -5(4+x)$$

$$29. 2(x+y)+7y$$

$$2x + 9y$$

$$16. -7(2x+9y)$$

$$23. (5+v)(-5)$$

$$-5v - 25$$

$$30. -4.8(3s+t)+3t$$

$$17. -9(2+3y)$$

$$-27y - 18$$

$$24. (w-2)4$$

$$31. 10-3(h+5)$$

$$-3h - 5$$

$$18. 4.7(3m+7n)$$

$$25. -7x(8n-m)$$

$$-56xn + 7xm$$

$$32. \frac{4}{15}(3y+5) - \frac{2}{5}y$$

33. $-2(u-w)+6$

$$-2u + 2w + 6$$

34. $-(4-2y)+16$

35. **TRAIN RIDE** Mr. and Mrs. Caputo are taking their family into the city on the train. The cost per person is \$5.80. If there are 4 members in their family, how much does the train trip cost? Justify your answers using the Distributive Property.

$$4(5.80)$$

$$4(6-.20)$$

$$24 - .80 = \boxed{\$23.20}$$

36. **CAMPING** Chantee went camping over the weekend. The cost for the site was \$16.90 a night for three nights. How much did it cost her to camp? Justify your answer by using the Distributive Property.

Multiple Choice

37. Simplify: $2(x+10)$

A. $20x$

B. $2x+10$

C. $2x+20$

D. $12x$

38. Simplify: $-20(z-5)$

A. $20z-5$

B. $-20z-5$

C. $20z+100$

D. $-20z+100$