

## Chapter 5 Review

Evaluate each expression if  $a = 2$  and  $b = 8$ .

1.  $3a + 1$       $3(2) + 1 = 6 + 1$

2.  $\frac{24}{b}$       $\frac{24}{8}$

1. 7

2. 3

Describe the relationship between the terms in the arithmetic sequence. Then write the next three terms in each sequence.

3. 4, 9, 14, 19,  $24, 29, 34$

4. 0, 14, 28, 42,  $56, 70, 84$

3. INCREASING BY 5

4. INCREASING BY 14

5. FISH The table shows the cost of goldfish. How much will 6 goldfish cost?

Number of Fish	Cost (\$)
1	2.80
2	5.60
3	8.40
4	11.20

$2.80(6) = \$16.80$

$5.60 + 11.20 = \$16.80$

$8.40(2) = \$16.80$

5. \$16.80

Name the property shown by each statement.

6.  $4m \cdot 0 \cdot 3m = 0$

7.  $5 + (a + 17) = (5 + a) + 17$

$5 + a + 17 = 17 + 5 + a$  ← COMMUTATIVE PROP OF ADDITION

Use the Distributive Property to rewrite each expression.

8.  $4(x + 7)$       $4(x) + 4(7)$

9.  $-5(y + 10)$       $-5(y) + -5(10)$

10. Write  $3x - 1 + 5x + 7$  in simplest form.

$3x + -1 + 5x + 7$

11. Find  $(x + 1) + (x + 1)$ .

$x + 1 + x + 1$

12. Find  $(4x - 7) - (2x - 2)$

$(4x + -7) - (2x + -2) = 4x + -7 + 2x + +2$

Find the GCF of each pair of monomials.

13.  $3x, 12x$       $3x$

14.  $16a, 20ab$       $4a$

15.  $25cd, 10d$       $5d$

6. MULTIPLICATION PROPERTY OF ZERO

7. ASSOCIATIVE PROP. OF ADDITION

8.  $4x + 28$

9.  $-5y + -50$

10.  $8x + 6$

11.  $2x + 2$

12.  $2x + -5$       $2x - 5$

13.  $3x$

14.  $4a$

15.  $5d$

## Factoring & the Distributive Property

Factor the following expressions. For example  $5n + 20 = 5(n + 4)$

1)  $6x - 18 = 6(x - 3)$       2)  $12m + 4 = 4(3m + 1)$       3)  $8v + 10 = 2(4v + 5)$



4)  $20 + 16s = 4(5 + 4s)$

5)  $5 - 30x = 5(1 - 6x)$

6)  $24x + 18y = 6(4x + 3y)$

$3(4 - 6n)$

Complete the table

7)

Factored	Distributed	Simplified
$4(3 + 2m)$	$4(3) + 4(2m)$	$12 + 8m$
$6(2 - 3n)$	$6(2) - 6(3n)$	$12 - 18n$
$5(3w - 5)$	$5(3w) - 5(5)$	$15w - 25$
$2(4x + 7)$	$2(4x) + 2(7)$	$8x + 14$
$7(2v + 3x)$	$7(2v) + 7(3x)$	$14v + 21x$

