

Chapter 3

Quiz

For use after Section 3.2

Identify the terms, coefficients, and constants of the expression.

1. $5h + 9$

2. $a^2 + 2 + 7b$

Answers

1. Terms = $5h, 9$

Write the expression using exponents.

3. $r \cdot r \cdot r \cdot r \cdot r \cdot r$

4. $4 \cdot d \cdot d \cdot d$

Coefficient: 5

Constant: 9

Evaluate the expression when $a = 4, b = 2,$ and $c = 8.$

5. $a + 7$
 $4 + 7 = 11$

6. bc
 $(2)(8)$
16

7. $\frac{c}{a}$ $\frac{8}{4} = 2$

Terms $a^2, 2, 7b$

Coefficients: 1, 7

Constant: 2

Complete the table.

8.

x	$x \cdot 3$
2	$2 \cdot 3 = 6$
4	$4 \cdot 3 = 12$
6	$6 \cdot 3 = 18$

9.

x	$4x - 1$
1	3
3	11
5	19

$4(1) - 1 = 3$
 $4(3) - 1 = 11$
 $4(5) - 1 = 19$

3. r^6

4. $4d^3$

5. $4 + 7 = 11$

6. 16

7. 2

Write the phrase as an expression.

10. the sum of 25 and 14

11. a number y divided by 7

12. a number x multiplied by 3

13. 4 less than a number w

14. The expression $m \div 4$ is the distance each person runs in a relay race that is m miles. How far does each person run in a relay race that is 12 miles? $m = 12$ $12 \div 4 = 3$

8. See left.

9. See left.

10. $25 + 14$

11. $y \div 7$ or $\frac{y}{7}$

12. $3x$

13. $w - 4$

14. 3 miles

15. $\$480$

$18h + 100p$
 $18(10) + 100(3)$
 $180 + 300$
 $\$480$

15. The expression $18h + 100p$ represents the amount (in dollars) that an insurance salesperson earns for working h hours and selling p policies. How much does the salesperson earn for working 10 hours and selling 3 policies? $\rightarrow p = 3$ $h = 10$

16. a. $55 + 20h$

b. $\$175$

16. Your school rents a dunking booth for a carnival. The company charges $\$55$ to rent the booth plus $\$20$ for each hour of rental.

a. Write an expression for the cost of renting the dunking booth for h hours.

b. Use your expression to find the cost of 6 hours

$55 + 20h$
 $55 + 20(6) \Rightarrow 55 + 120 = \175

Cost is Rental fee of $\$55$ plus $\$20$ times the hours (h)

$$55 + 20h$$