

Chapter 7 Review Questions

- Use exponents to rewrite the expression.
 $5 \cdot 5 \cdot 5 \cdot 8 \cdot 8 \cdot 8 \cdot 8 \cdot 8$
- A plumber charges \$20 for transportation and \$75 per hour for repairs.
Write an expression that can be used to find the cost in dollars for a repair that takes “h” hours.
How much would it cost if the job took seven hours to complete?
- Sophia is 4 years older than her brother Luke. Let “L” represent Luke’s age.
Write the expression that represents Sophia’s age.
- In the expression $5x + 8y^2 - 13$.
What are the terms in the expression?
What are the coefficients?
What are the constants?
- Simplify the expression $5k - 3r + 8x - 7k + 3x + 12r$.
- Solve the expression: $7 \cdot (6 - 2)^2 \div 4$
- Write the algebraic expression for “16 more than the product of 7 and k.” What would the value be for the expression is $k = 4$.
- What is verbal expression for $(x + 5) - 8$?
- Which are equivalent expressions?
 $4m + 8$ $4(m + 2)$ $2(2m + 8)$ $3m + 2 + m + 6$ $5m + 7 - m - 1$
- Which statements are true below?
 - $z \times z \times z + 5 = 8z$
 - $(k + k) = k^2$
 - $j + 3 + j + 2 = 5 + 2j$
 - $z \times z \times z = 3z$
 - $3 - x^4 = 3 - (x \cdot x \cdot x \cdot x)$

11. Use the distributive property.

Enter the number that makes the following equation true. $6(8 + 4) = x + 24$

Find "x".

12. What are the properties of each of the following?

a. $x + 7 = 7 + x$

b. $5(x - 2) = 5x - 10$

c. $3 + (5 + 7) = (3 + 5) + 7$

d. $x + 0 = x$

e. $10 = 10 \cdot 1$