

Name _____

Chapter 1 Review HW

Lessons 1-1 through 1-4

Write an algebraic expression for each phrase.

1. a number x plus 11
2. 15 less than the product of 2 and r
3. the quotient of h and 4 plus 10
4. the product of 6 and t divided by 7

Simplify each expression.

5. $18 \div (5 + 2^2)$

6. $\sqrt{169}$

7. $5 + 4^2 - 3(7) + 3^2$

8. $25 \div (42 + 2^3)$

9. $-16 + 8y + (-3)$

10. $(\frac{5}{6} \cdot 0)(21)$

Evaluate each expression for the given values of the variables.

11. $4t + 2u^2 - u^3$; $t = 2$ and $u = 1$

12. $(2a)^2 - (b^3 - a^2)$; $a = -3$ and $b = 2$

13. $5y + 6z^2 - y^3$; $y = -4$ and $z = 5$

14. $(2h)^3 - (k^3 - h^2)$; $h = -1$ and $k = -3$

15. Name the subset(s) of the real numbers to which each number belongs. Then order the numbers from least to greatest.

$$-14, 1\frac{3}{4}, \sqrt{2}$$

16. Estimate $\sqrt{35}$ to the nearest integer.

17. Which property is illustrated by $6 \times 5 = 5 \times 6$?

18. Use grouping symbols to make the following equation true. $5^3 \div 5 + 20 = 5$

Answers

1. $x + 11$ 2. $2r - 15$ 3. $h/4 + 10$ 4. $6t / 7$ 5. 2 6. 13
7. 9 8. $\frac{1}{2}$ 9. $-19 + 8y$ 10. 0 11. 9 12. 28
13. 194 14. 20 15. $-14 = \text{integer, rational real}; 1 \frac{3}{4} = \text{rational, real}; \sqrt{2} = \text{irrational, real}$
16. 6 17. Commutative of multiplication 18. $5^3 \div (5 + 20)$