

Introduction to Algebra

Chapter 1 Practice Test

1. Evaluate $\frac{x+1}{y}$ when $x = -3$ and $y = 6$. Please circle your answer.

Use either $<$ or $>$ in the to write a true sentence.

2. 9 7

3. -6 -3

4. $|-5|$ 9

5. Find the absolute value. Please circle your answer.

a. $|-8| =$

b. $|4| =$

6. Find the opposite. Please circle your answer.

a. $-\frac{3}{5}$

b. 13

7. Find the reciprocal. Please circle your answer.

a. $-\frac{11}{9}$

b. 12

Problems 8 - 15 compute and simplify: Please circle your answer.

8. $-2 - 6 + 4 - 9 =$

9. $-45 \div 9 =$

10. $4.56 \div -3 =$

11. $\frac{1}{3} - \frac{4}{5} =$

12. $-20 \div (-5) + 36 \div (-4) =$

13. $6 + 7 - 4 - (-3) =$

14. $20 + 4^3 \div (-8) =$

15. $\frac{10 - 6^2}{9^2 + 3^2} =$

Problems 14 - 17 name the property illustrated by the equation. Please circle your answer.

16. $m + 34 = 34 + m$

17. $5(x - 3) = 5x - 5(3)$

18. $2 + (5 + 6) = (2 + 5) + 6$

19. $0 + a = a + 0 = a$

Problems 18 - 25 remove parenthesis and simplify. Please circle your answer.

20. $9x - (4x + 3) =$

21. $3a + 2a - (4a + 7) =$

22. $8[7 - 6(4 - 2)] =$

23. $2(x + 4) + 2x - 8 =$

24. $2x + 4y - (2z + 3x) - 8 + 5y =$

25. $-(x + 5y) + 2(x - y) =$

Problems 26 – 30 translate each phrase to an algebraic expression. Use any letter for the variable. Please circle your answer.

26. Twelve less than some number

27. The sum of nine and some number

28. Two more than six times some number

29. Twice some number

30. The difference of two numbers