Chapter 1 Practice Test A Name_____

Evaluate.

1) $\frac{m - n}{3}$, for m = 16 and n = 10

Solve the problem.

2) The area of a triangle with base b and height h is given by the formula $A = \frac{1}{2}bh$. Find the area of a triangle when the base is 12 cm and the height is 5 cm.

3) $-10 + (-22) + (-19) + (-3)$

4) $-20 + 2 - (-1) - 15 + (-8)$

5) $-10 \cdot (-10)$

6) $(-7)(-3)(-6)$

7) $\frac{55}{-5}$

8) $\frac{-63}{-3}$

Combine like terms.

9) $-8z - (-4z)$

10) $-7 + 7m + 12 + (-9m)$

11) $-8 + (-4x) + 7x - 5$

12) $-13y + (-8x) + (-5x)$

Simplify.

13) -6^2

14) $\frac{27 - 5 \cdot 3}{2^3 \div 2^2 - (-2)^2}$

15) $4(-2) + |9(-7)|$

16) $5 \cdot (2 + 5)^2 - 2 \cdot (5 - 3)^2$

17) $(-3y)^2$

18) $-3(7r + 5) + 6(8r + 2)$

19) $3x - y - 3(9x - 8y + 3z)$

Evaluate.

20) $\frac{5x - 3x^2}{x^2 - 10}$, for $x = -3$

21) $\frac{x + y}{5}$, for $x = 8$ and $y = 7$

22) $5 + x^4$, for $x = -1$

Write the expression using exponents.

23) $4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$

24) $7p \cdot 7p \cdot 7p \cdot 7p$

Use the distributive law to factor the given expression.

25) $5s + 35 + 50t$

26) $7x + 14y$

27) $11 + 11z$

Use the distributive law to multiply.

28) $(4 + u + v)2$

29) $8(6x + 5)$

Use the commutative law of multiplication to write an equivalent expression.

30) $6a + b$

Find the absolute value.

31) $|-4|$

32) $\left|\frac{19}{3}\right|$

Name the correct property to make the sentence true.

33) 4r is equivalent to r4 by the

34) (8m)g is equivalent to 8(mg) by the

Use the associative law of addition to write an equivalent expression.

35) w + (xy + z)

ANSWERS

36) 1. 2
2. 30 sq. cm.
3. -54
4. -40
5. 100
6. -126
7. -11
8. 21
9. -4z
10. -2m + 5
11. 3x -13
12. -13y - 13x
13. -36
14. -6
15. 55
16. 237
17. $9y^2$
18. 27r - 3
19. -24x + 23y - 9z
20. 42
21. 3
22. 6
23. 4^6
24. $(7p)^4$
25. 5(s + 7 + 10t)
26. 7(x + 2y)
27. 11(1 + z)
28. 8 + 2u + 2v
29. 48x + 40
30. a6 + b
31. 4
32. $\frac{19}{3}$
33. commutative law for multiplication
34. associative law for multiplication
35. (w + xy) + z