Integrated Math 1 Name_____

Unit 1 Practice Test

Date_____

Name the set or sets to which each number belongs.

1) $\sqrt{84}$

A) Integer, Rational
B) Natural, Whole, Integer, Rational
C) Rational
D) Irrational

2) $\frac{19}{5}$

A) Irrational
B) Natural, Whole, Integer, Rational
C) Whole, Integer, Rational
D) Rational

3) -1

A) Natural, Whole, Integer, Rational
B) Integer
C) Integer, Rational
D) While, Integer, Rational

4) 14

A) Whole, Integer, Rational
B) Natural, Whole, Integer, Rational
C) Irrational
D) Integer, Rational

5) 8.7

A) Whole, Integer, Rational
B) Rational
C) Natural, Whole, Integer, Rational
D) Integer, Rational

6) 0

A) Rational
B) Irrational
C) Whole, Integer, Rational
D) Natural, Whole, Integer, Rational

7) -12

A) Rational
B) Integer, Rational
C) Irrational
D) Whole, Integer, Rational

8) $\sqrt{8}$

A) Whole, Integer, Rational
B) Natural, Whole, Integer, Rational
C) Irrational
D) Rational

9) 1

A) Whole, Integer, Rational
B) Rational
C) Integer, Rational
D) Natural, Whole, Integer, Rational

10) 6

A) Rational
B) Whole, Integer, Rational
C) Irrational
D) Natural, Whole, Integer, Rational

11) −12

A) Natural, Whole, Integer, Rational
B) Whole, Integer, Rational
C) Integer, Rational
D) Irrational

12) $\frac{9}{10}$

A) Natural, Whole, Integer, Rational
B) Integer, Rational
C) Rational
D) Irrational

Find each product.

13) $8 \cdot 7 \cdot 2$

14) $8 \cdot 4 \cdot 8$

15) $-4 \cdot 2 \cdot 5$

16) $5 \cdot 2 \cdot -1$

17) $3 \cdot 8 \cdot -5$

18) $2 \cdot -6 \cdot 5$

Evaluate each expression.

19) $-7 - -3 - 3$

20) $-4 + 2 - 3$

21) $-6 + -8 - 4$

22) $-3 - 2 + -6$

23) $2 - 3 - 7$

24) $5 - -4 + -2$

Write each number in scientific notation.

25) 690000

26) 0.000842

27) 0.0000298

28) 0.0051

Write each number in standard notation.

29) 5.8×10^{-2}

30) 2.34×10^{2}

31) 7×10^{0}

32) 6.9×10^{1}

Simplify. Write each answer in scientific notation.

33) $(5.1 \times 10^{2})(9.2 \times 10^{-5})$

34) $(9.43 \times 10^{-6})(5.8 \times 10^{2})$

35) $(3.4 \times 10^{-4})(3.2 \times 10^{3})$

36) $(4.25 \times 10^{6})(7.7 \times 10^{-2})$

37) $\dfrac{9 \times 10^{-1}}{9.6 \times 10^{3}}$

38) $\dfrac{7 \times 10^{-6}}{4.9 \times 10^{5}}$

39) $\dfrac{2.8 \times 10^{-6}}{2.3 \times 10^{-4}}$

40) $\dfrac{2 \times 10^{-4}}{5.3 \times 10^{-3}}$

Evaluate each expression.

41) $(6 + 2) \times 5 - (1 + 4)$

42) $15 \div (3 + 2 + 3 - 3)$

43) $2 \times 4^2 + 4 + 4$

44) $12 \div (3(4 - (2 + 1)))$

Evaluate each using the values given.

45) $p - m \div 5 - (p - p)$; use $m = 5$, and $p = 4$

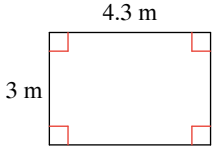
46) $y \div 5 + zy \div 4$; use $y = 5$, and $z = 4$

47) $y + y \times 2x \div 2$; use $x = 5$, and $y = 2$

48) $x - z \div 6 - (y - y)$; use $x = 3$, $y = 4$, and $z = 6$

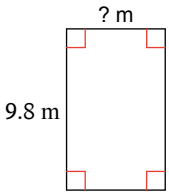
Find the area of each.

49)



Find the missing measurement. Round your answer to the nearest tenth.

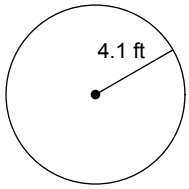
50)



Area = 58.8 m²

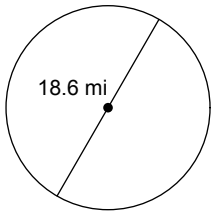
Find the DIAMETER of each circle. Round your answer to the nearest tenth.

51)



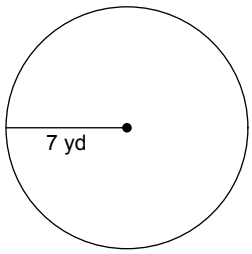
Find the CIRCUMFERENCE of each circle. Use 3.14 **for the value of** π**. Round your answer to the nearest tenth.**

52)



Find the AREA of each. Use 3.14 **for the value of** π**. Round your answer to the nearest tenth.**

53)



Use the DISTANCE formula for the question below.

54) If a car drove at 45 mph for 2 hours, how far did it drive?

Convert each temperature.

55) 64°F

56) 44°C

Use SIMPLE INTEREST to find the interest earned.

57) $33,100 at 13% for 2 years

Use COMPOUND INTEREST to find the ending balance.

58) $10,800 at 14% compounded 12 times per year for 2 years

Solve each equation for the indicated variable.

59) $g = c - x$, for x

60) $z = x + m$, for x

61) $z = mx$, for x

62) $z = \frac{x}{m}$, for x

63) $g = y - cx$, for x

64) $z = b + m - a$, for a

65) $ac = rd$, for a

66) $k + a = v + w$, for a

Answers to Unit 1 Practice Test

1) D
2) D
3) C
4) B
5) B
6) C
7) B
8) C
9) D
10) D
11) C
12) C
13) 112
14) 256
15) −40
16) −10
17) −120
18) −60
19) −7
20) −5
21) −18
22) −11
23) −8
24) 7
25) 6.9×10^{5}
26) 8.42×10^{-4}
27) 2.98×10^{-5}
28) 5.1×10^{-3}
29) 0.058
30) 234
31) 7
32) 69
33) 4.692×10^{-2}
34) 5.469×10^{-3}
35) 1.088×10^{0}
36) 3.273×10^{5}
37) 9.375×10^{-5}
38) 1.429×10^{-11}
39) 1.217×10^{-2}
40) 3.774×10^{-2}
41) 35
42) 3
43) 40
44) 4
45) 3
46) 6
47) 12
48) 2
49) 12.9 m²
50) 6 m
51) 8.2 ft
52) 58.4 mi
53) 153.9 yd²
54) 90 miles
55) °C
56) °F
57) $41,706.00
58) $14,266.66
59) $x = -g + c$
60) $x = z - m$
61) $x = \frac{z}{m}$
62) $x = zm$
63) $x = \frac{-g + y}{c}$
64) $a = -z + b + m$
65) $a = \frac{rd}{c}$
66) $a = -k + v + w$