

Unit 1 Practice Test

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) Whole, 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)  $8 \cdot 7 \cdot 2$

$$\underbrace{56} \cdot 2 = \boxed{112}$$

14)  $8 \cdot 4 \cdot 8$

$$\underbrace{32} \cdot 8 = \boxed{256}$$

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

$$\underbrace{-8} \cdot 5 = \boxed{-40}$$

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

$$\underbrace{10} \cdot -1 = \boxed{-10}$$

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

$$\underbrace{24} \cdot -5 = \boxed{-120}$$

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

$$\underbrace{-12} \cdot 5 = \boxed{-60}$$

**Evaluate each expression.**

19)  $-7 + +3 - 3$

$$\underbrace{-4} - 3 = \boxed{-7}$$

20)  $-4 + 2 - 3$

$$\underbrace{-2} - 3 = \boxed{-5}$$

21)  $-6 + -8 - 4$

$$\underbrace{-14} - 4 = \boxed{-18}$$

22)  $-3 - 2 + -6$

$$\underbrace{-5} + -6 = \boxed{-11}$$



23)  $2 - 3 - 7$

$$\begin{array}{r} \checkmark \\ -1 - 7 = \boxed{-8} \end{array}$$

24)  $5 + +4 + -2$

$$\begin{array}{r} \checkmark \\ 9 + -2 = \boxed{7} \end{array}$$

Write each number in scientific notation.

25) 690000

$$6.9 \times 10^5$$

26) 0.000842

$$8.42 \times 10^{-4}$$

27) 0.0000298

$$2.98 \times 10^{-5}$$

28) 0.0051

$$5.1 \times 10^{-3}$$

Write each number in standard notation.

29)  $5.8 \times 10^{-2}$

$$.058$$

30)  $2.34 \times 10^2$

$$234$$

31)  $7 \times 10^0$

$$7$$

32)  $6.9 \times 10^1$

$$69$$

Simplify. Write each answer in scientific notation.

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

$$46.92 \times 10^{-3}$$

$$4.692 \times 10^{-2}$$

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

$$54.694 \times 10^{-4}$$

$$5.4694 \times 10^{-3}$$

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

$$10.88 \times 10^{-1}$$

$$1.088 \times 10^0$$

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

$$32.725 \times 10^4$$

$$3.2725 \times 10^5$$

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

$$.9375 \times 10^{-4}$$

$$9.375 \times 10^{-5}$$

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

$$1.429 \times 10^{-11}$$