

Chapter 6 Practice Test

1

The density of an object is equal to the mass of the object divided by the volume of the object. What is the mass, in grams, of an object with a volume of 0.01 m^3 and a density of 4.54 grams per cubic centimeters? (1 m = 100 cm)

- A) 454
- B) 4,540
- C) 45,400
- D) 454,000

2

Jason and Donny painted a house and received \$1,200. To complete the painting job Jason painted 4 hours 25 minutes and Donny spent 2 hours and 15 minutes. If they split the \$1,200 in proportion to the amount of time each spent painting, how much did Donny receive?

- A) \$405.00
- B) \$443.00
- C) \$472.00
- D) \$492.00

3

The tennis balls in a bag are either white or yellow. If the ratio of white balls to yellow balls is $\frac{3}{10}$, which of the following could not be the number of balls in the bag?

- A) 26
- B) 39
- C) 42
- D) 52

4

A car is traveling at a constant rate of x miles per hour. How many miles will the car travel in y minutes?

- A) $60xy$
- B) $\frac{60x}{y}$
- C) $\frac{xy}{60}$
- D) $\frac{y}{60x}$

5

A tree is 8 feet tall and grows 8 inches each year. In how many years will the tree reach a height of 30 feet?

- A) 27
- B) 33
- C) 45
- D) 52

6

Aaron reads x pages of a science fiction book in m minutes. If he continues reading at this rate, what will be the number of pages he reads in $20m$ seconds?

- A) $\frac{1}{3}x$
- B) $\frac{1}{2}x$
- C) $\frac{2}{3}x$
- D) $2x$

7

If $\frac{x}{y} = 1$, what is the value of $x - y - 1$?

- A) -1
- B) 0
- C) 1
- D) The value cannot be determined from the information given.

8

In a certain room the ratio of males to females is 4 to 5. After 8 males enter the room, the ratio of males to females is 6 to 5. What is the total number of people in the room before the additional males enter the room?

- A) 27
- B) 36
- C) 45
- D) 54

9

A person is born every 5 seconds and a person dies every 12 seconds. How many seconds does it take for the population to grow by one person?

- A) 7 sec
- B) $8\frac{4}{7}$ sec
- C) 10.5 sec
- D) $10\frac{5}{7}$ sec

10

Steve is going to paint a wall that measures 9 feet by 12 feet. If one gallon of paint is needed for each s square foot of wall and each gallon costs g dollars, in terms of s and g how much does it cost to paint the entire wall?

- A) $\frac{108}{gs}$
- B) $\frac{gs}{108}$
- C) $\frac{108s}{g}$
- D) $\frac{108g}{s}$

11

If 2 inches are equivalent to 5 centimeters, how many square centimeters are in one square inch?

12

A large painting has a length of 18 inches and a width of 12 inches. If each dimension is reduced by x inches to make the ratio of length to width 5 to 3, what is the value of x ?