

Chapter 7 Practice Test

1

A chemist mixes x mL of a 34% acid solution with a 10% acid solution. If the resulting solution is 40 mL with 25% acidity, what is the value of x ?

- A) 18.5
- B) 20
- C) 22.5
- D) 25

2

The price of a package of 4 pens is \$8.00. The same pens are sold at \$2.50 each. If Alex bought three packages of pens rather than buying 12 pens individually, the amount he saved on 12 pens is what percent of the amount he paid?

- A) 12%
- B) 20%
- C) 25%
- D) 30%

3

There are 600 bottles of sports drinks in a store. 25% of the bottles are orange flavored drinks. On Monday 30% of the orange flavored drinks in the store were sold and on Tuesday 20% of the remaining orange flavored drinks were sold. How many bottles of orange flavored drinks were sold in the two days?

- A) 52
- B) 58
- C) 66
- D) 75

4

A tablet with a list price of x dollars is discounted by 15% and then discounted an additional 12%. What is the final sale price of the tablet, in terms of x ?

- A) $0.73x$
- B) $0.748x$
- C) $0.75x$
- D) $0.765x$

5

There is a total of n pairs of shoes in a store, all of which are either black or brown. If there are m pairs of brown shoes in the store, then in terms of m and n , what percent of the shoes in the store are black?

- A) $\frac{m}{n}\%$
- B) $\frac{n-m}{n}\%$
- C) $(1 - \frac{100m}{n})\%$
- D) $100(1 - \frac{m}{n})\%$

6

The numbers a , b , and c are positive and a equals $3.2bc$. If b is increased by 150% and c is decreased by 60%, then a is

- A) increased by 90%
- B) increased by 10%
- C) unchanged
- D) decreased by 10%

7

There are 10 history books in a bookcase. When the number of books increases by x percent, the new number of history books is 24. What is the value of x ?

- A) 58
- B) 70
- C) 120
- D) 140

8

Number n is 25 less than 120 percent of itself. What is the value of n ?

- A) 125
- B) 120
- C) 105
- D) 90

9

Of the 500 cars displayed in a certain car dealer, 7 percent are blue and 4 percent are red. The number of blue cars in the car dealer are what percent greater than the number of red cars?

- A) 30%
- B) 50%
- C) 75%
- D) 125%

10

If 300% of 0.18 is equivalent to 20% of b , then b is equivalent to what number?

11

Five people contributed \$9,000 each toward the purchase of a sailboat. If they ended up paying \$38,500 plus 8% sales tax for the boat, how much money should be refunded to each person?

12

A store used to sell an MP3 for \$72, which is 50% more than the wholesale cost. At a special holiday sale, the price of the MP3 was 20% less than the wholesale cost. What was the special sale price of the MP3?