#1

For the finale of a TV show, viewers could use either social media or a text message to vote for their favorite of two contestants. The contestant receiving more than 50% of the vote won. An estimated 10% of the viewers voted, and 30% of the votes were cast on social media. Contestant 2 earned 70% of the votes cast using social media and 40% of the votes cast using a text message. Based on this information, which of the following is an accurate conclusion?

A) If all viewers had voted, Contestant 2 would have won.

B) Viewers voting by social media were likely to be younger than viewers voting by text message.

C) If all viewers who voted had voted by social media instead of by text message, Contestant 2 would have won.

D) Viewers voting by social media were more likely to prefer Contestant 2 than were viewers voting by text message.

#2

During the first month of sales, a company sold 1,300,000 units of a certain type of smartphone. During the same month, 15% of the units sold were returned. If sales and the return rate remain the same for each of the next 5 months, about how many units of this smartphone will be returned to the company during this 6-month period?

A) 195,000

B) 975,000

C) 1,170,000

D) 6,630,000

#3

Last year, Cedric had 35 plants in his garden. This year, the number of plants in Cedric's garden is 60% greater than the number of plants in his garden last year. How many plants does Cedric have in his garden this year?

#4   ID: 7cab9fe1

Which expression represents the result of increasing a positive quantity w by 43%?

A) $1.43w$

B) $0.57w$

C) $43w$

D) $0.43w$

#7   ID: 8e2e424e

The number k is 36% greater than 50. If k is the product of 50 and r, what is the value of r ?

A) 36

B) 3.6

C) 1.36

D) 0.36

#5   ID: 121dc44f

The population of City A increased by 7% from 2015 to 2016. If the 2016 population is k times the 2015 population, what is the value of k?

A) 0.07

B) 0.7

C) 1.07

D) 1.7

#8   ID: 709e04de

The value of z is 1.13 times 100. The value of z is what percent greater than 100?

A) 11.3

B) 13

C) 130

D) 213

#6   ID: 8a714fa1

Which of the following represents the result of increasing the quantity x by 9%, where $x > 0$?

A) $1.09x$

B) $0.09x$

C) $x + 9$

D) $x + 0.09$

#9
ID: ba61d95f

The population of Greenville increased by 7% from 2015 to 2016. If the 2016 population is k times the 2015 population, what is the value of k ?

A) 0.07

B) 0.7

C) 1.07

D) 1.7

#10
ID: 8cbf1415

In a group, 40% of the items are red. Of all the red items in the group, 30% also have stripes. What percentage of the items in the group are red with stripes?

A) 10%

B) 12%

C) 70%

D) 75%

#11
ID: 96a45430

A number n is increased 6%. If the result is 318, what is the value of n ?

A) 199

B) 299

C) 300

D) 337

#12
ID: b2f6f17d

A customer's monthly water bill was $75.74. Due to a rate increase, her monthly bill is now $79.86. To the nearest tenth of a percent, by what percent did the amount of the customer's water bill increase?

A) 4.1%

B) 5.1%

C) 5.2%

D) 5.4%

#13
ID: c256b723

The amount of Hanna's bill for a food order was $ 50$. Hanna gave a tip of 20% of the amount of the bill. What is the amount, in dollars, of the tip Hanna gave?

#14
ID: 94c65646

432 is 96% of what number?

#15
ID: 7b731fc3

What number is 40% greater than 115?

#16
ID: e9f4521a

13 is p% of 25. What is the value of p?

#17
ID: 566759ef

Thomas installed a new stove in his restaurant. At the time of installation, the stove had a value of $800. Thomas estimates that each year the value of the stove will depreciate by 20% of the previous year's estimated value. What is the estimated value of the stove exactly 2 years after Thomas installed it?

A) $480

B) $512

C) $556

D) $640

#18
ID: ad1d6adb

The number of coins in a collection increased from 9 to 90. What was the percent increase in the number of coins in this collection?

A) 10%

B) 81%

C) 90%

D) 900%

#19
ID: d72a2b4d

In March, the price of a collectible card was $ 15.50. In April, the price of the collectible card was $ 17.36. The price of the collectible card in April was p% of the price of the collectible card in March. What is the value of p?

A) 12

B) 88

C) 112

D) 188