

TEST NAME: **Ratio & Prop EOG prep**
TEST ID: **4052060**
GRADE: **07 - Seventh Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **My Classroom**

Student: _____

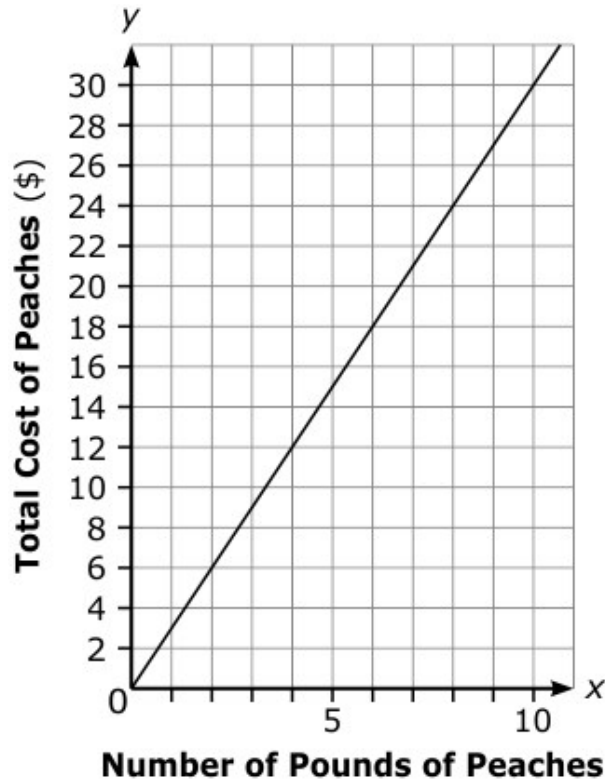
Class: _____

Date: _____

1. A cookie recipe uses $\frac{1}{2}$ cup of sugar for 2 dozen cookies. How many cookies can be made with 1 cup of sugar?
 - A. 12
 - B. 24
 - C. 36
 - D. 48

2. James purchased 3 pounds of steak for \$21. Which equation can be used to determine the cost, y , to purchase x pounds of steak?
 - A. $y = 7x$
 - B. $x = 7y$
 - C. $y = \frac{1}{3}x$
 - D. $x = \frac{1}{3}y$

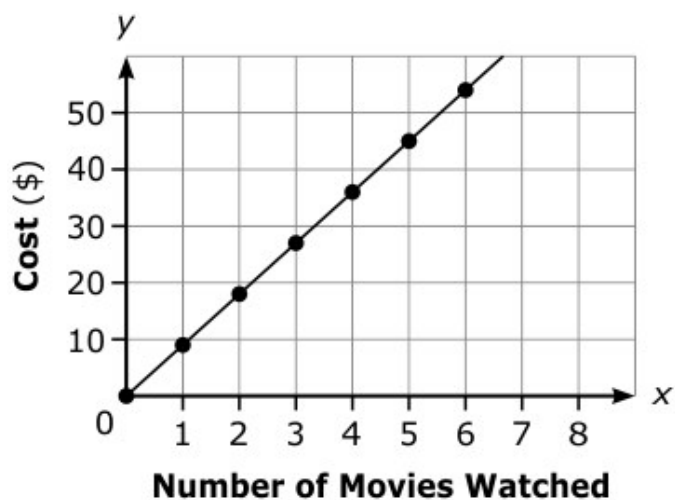
3. The graph shows the relationship between the total cost of peaches and the number of pounds of peaches purchased.



What is the price per pound of peaches?

- A. \$1.50
- B. \$2.00
- C. \$2.50
- D. \$3.00

4. This graph shows the cost to rent movies from a streaming service.



What is the meaning of the coordinate (5, 45)?

- A. It costs \$5 to watch 45 movies.
- B. It costs \$45 to watch 5 movies.
- C. Five people watched 45 movies.
- D. Forty-five people watched 5 movies.

5. Which table represents a proportional relationship?

A.

x	y
0	0
1	5
2	10
3	15

B.

x	y
0	0
2	4
4	8
6	10

C.

x	y
0	0
3	2
6	3
9	4

D.

x	y
0	0
5	3
10	9
15	12

6. A jar contains 200 coins.

- Zack pulls out a coin, records its value, and then puts the coin back into the jar.
- Zack does this same process 8 times and records 1 quarter, 2 dimes, 2 nickels, and 3 pennies.

Based on these results, how many coins in the jar can Zach expect to have a value of \$0.10 or more?

- A. 75
- B. 67
- C. 50
- D. 25

7. On a city map, $\frac{3}{4}$ inch corresponds to $7\frac{1}{2}$ miles.

- Bonnie drives from her house to a movie theater and then from the movie theater to a restaurant.
- On the map, the theater is $\frac{1}{2}$ inch from her house and the restaurant is $\frac{3}{4}$ inch from the theater.

How many miles has Bonnie driven when she gets to the restaurant?

- A. $1\frac{1}{4}$ miles
- B. $9\frac{3}{8}$ miles
- C. 10 miles
- D. $12\frac{1}{2}$ miles

8. The table below shows the cost, s , to purchase p pounds of steak at a local grocery store.

Number of Pounds (p)	Cost of Steak (s)
2.5	\$23.98
3.0	\$28.77
3.5	\$33.57
4.0	\$38.36

Which statement is true about the relationship shown in the table?

- A. The relationship is proportional, and the equation that represents this relationship is $s = 9.59 + p$.
 - B. The relationship is proportional, and the equation that represents this relationship is $s = 9.59 \div p$.
 - C. The relationship is proportional, and the equation that represents this relationship is $s = 9.59p$.
 - D. The relationship is not proportional.
9. A table of values is shown.

x	y
2	6
4	12
6	18

Which statement is true?

- A. The table represents a proportional relationship because all the numbers in the table are even.
- B. The table does not represent a proportional relationship because the x -values do not increase by 1.
- C. The table represents a proportional relationship because the ratios are the same for each set of numbers.
- D. The table does not represent a proportional relationship because the ratios are different for each set of numbers.

10. Ben jogged $4\frac{1}{2}$ miles in $1\frac{1}{4}$ hours at a constant rate. How far did Ben jog in one hour?
- A. $5\frac{5}{8}$ miles
- B. $3\frac{3}{5}$ miles
- C. $3\frac{1}{4}$ miles
- D. $\frac{5}{18}$ mile
11. Ryan drinks $1\frac{1}{2}$ liters of water every $\frac{3}{4}$ of an hour at a constant rate. How many liters of water does Ryan drink in one hour?
- A. 3 liters
- B. $2\frac{1}{2}$ liters
- C. 2 liters
- D. $1\frac{1}{2}$ liters
12. In the table below, Dillon recorded the amount of money he earned based on the number of days he worked.

Time Worked	Amount Earned
$\frac{1}{2}$ day	\$63
3 days	\$378
5 days	\$630
20 days	\$2,520

What does the unit rate represent?

- A. Dillon earned \$315 per day.
- B. Dillon earned \$126 per day.
- C. Dillon earned \$94 per day.
- D. Dillon earned \$32 per day.

13. The quantities x and y shown in the table below are proportional.

x	y
$\frac{1}{2}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{3}{8}$
1	$\frac{1}{2}$
$1\frac{1}{4}$	$\frac{5}{8}$

What is the constant of proportionality?

- A. $\frac{3}{8}$
- B. $\frac{1}{2}$
- C. $\frac{3}{4}$
- D. **1**

14. The table below shows the cost of buying different numbers of DVDs.

Number of DVDs	Cost (\$)
3	23.85
5	39.75
8	63.60
10	x

What value of x would make the table proportional?

- A. \$71.55
- B. \$79.50
- C. \$87.45
- D. \$89.50

15. Jason has a part-time job. The table below shows the number of hours he worked and how much money he earned on three different days.

Hours Per Day	Money Earned
4	\$39.00
5	\$48.75
7	\$68.25

How much does Jason earn per hour?

- A. \$2.44
 - B. \$9.75
 - C. \$39.00
 - D. \$52.00
16. The table shows how many pages Jenny read over time.

Time (hours)	Total Pages Read
3	93
5	155
8	248
x	372

Which value of x would create a proportional relationship between the total pages Jenny read and the time?

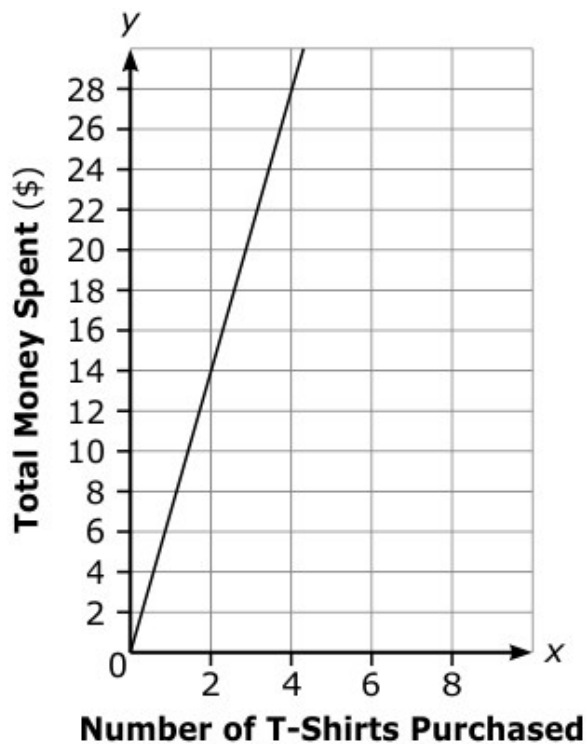
- A. 9
- B. 10
- C. 11
- D. 12

17. A sports company offers its employees an incentive if they each sell 40 pairs of athletic shoes in one week. The results are shown below.
- John sold $\frac{4}{5}$ of this amount.
 - Kayla sold 55% of this amount.
 - Juan sold 0.35 of this amount.

How many total pairs of athletic shoes were sold by John, Kayla, and Juan?

- A. 22
- B. 32
- C. 68
- D. 110

18. The relationship between the number of T-shirts purchased and total money spent is shown.



What is the cost of two T-shirts?

- A. \$7
- B. \$13
- C. \$14
- D. \$15

19. Abigail and Elizabeth babysit in their neighborhoods. This table shows how much Abigail earned for 3 different jobs.

Time Worked	Money Earned
3.5 hours	\$15.75
4.5 hours	\$20.25
6.5 hours	\$29.25

Elizabeth charges \$5.25 per hour to babysit. Abigail and Elizabeth each babysit for 8 hours. Which statement is correct?

- A. Elizabeth would make \$0.75 more than Abigail.
 - B. Elizabeth would make \$6.00 more than Abigail.
 - C. Abigail would make \$4.50 more than Elizabeth.
 - D. Abigail would make \$30.00 more than Elizabeth.
20. Sherry can make 5 pies in 4 hours. How many hours does it take Sherry to make 16 pies?
- A. 12.8 hours
 - B. 20 hours
 - C. 35.4 hours
 - D. 64 hours
21. Ryan drinks $1\frac{1}{2}$ liters of water every $\frac{3}{4}$ of an hour at a constant rate. How many liters of water does he drink in 3 hours?
- A. 9 liters
 - B. $7\frac{1}{2}$ liters
 - C. 6 liters
 - D. $4\frac{1}{2}$ liters

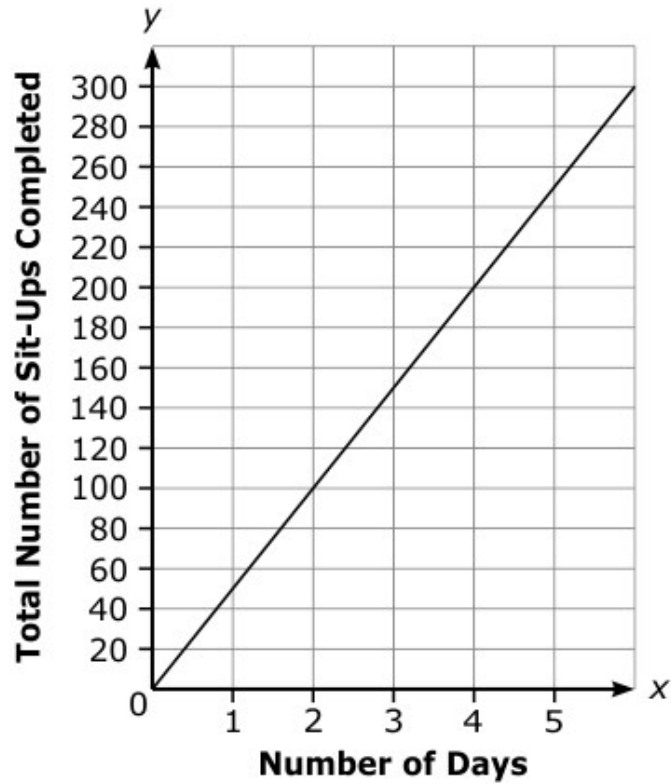
22. Josiah recorded the number of cans of soup and the total cost of the soup in this table.

Cans of Soup	Cost (\$)
2	1.70
4	3.40
6	5.10
8	6.80

What does (6, 5.10) represent?

- A. One can of soup costs \$0.85.
- B. One can of soup costs \$5.10.
- C. Six cans of soup cost \$0.85.
- D. Six cans of soup cost \$5.10.

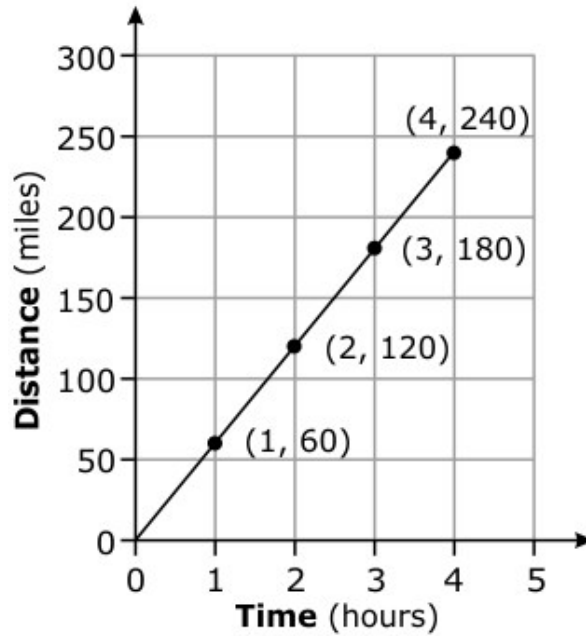
23. This graph shows the relationship between the number of days Curtis did sit-ups and the total number of sit-ups he completed.



How many sit-ups did Curtis complete each day?

- A. 30
- B. 50
- C. 70
- D. 90

24. This graph shows the distance a family had traveled after a certain number of hours on their trip to the beach.



What does the point (3, 180) mean in the context of the graph?

- A. The family traveled 180 miles during the third hour of the trip.
- B. It took the family 3 hours to travel to the beach.
- C. It took the family 3 hours to travel 180 miles.
- D. The family traveled a total of 180 miles.

25. This table shows the number of students attending middle schools for two school years.

School	2011-2012	2012-2013
Jackson Middle School	523	555
Brown Middle School	429	464
Howard Middle School	414	414
Greenville Middle School	503	567

Based on the table, which statement is true?

- A. The average overall increase in students at all middle schools was about 7%.
 - B. The average overall increase in students at all middle schools was about 9%.
 - C. The increase in students at Jackson Middle School was about 15% higher than Howard Middle School.
 - D. The increase in students at Greenville Middle School was about 20% higher than Howard Middle School.
26. A store marks up a laptop 150% from its original price of \$299. There is a sale for 25% off all items in the store. What is the sale price for the computer?
- A. \$448.50
 - B. \$336.38
 - C. \$225.00
 - D. \$112.13

27. Raymond's Bake Shop sold $26\frac{1}{2}$ dozen cupcakes on Saturday. On Friday, the bake shop sold $19\frac{3}{4}$ dozen cupcakes. What is the **approximate** percent increase in cupcake sales from Friday to Saturday?
- A. 2.6%
 - B. 6.8%
 - C. 25.0%
 - D. 34.0%
28. A student was measuring water in a graduated cylinder. The student read the amount of water at 20 ml. The actual amount of water in the graduated cylinder was 17 ml. What is the **approximate** percent error?
- A. 3%
 - B. 8%
 - C. 15%
 - D. 18%
29. A store marks its merchandise up 225% from the price it pays. The store buys a bag of chips for \$1.20. How much will the store charge for the bag of chips?
- A. \$2.70
 - B. \$3.38
 - C. \$3.45
 - D. \$3.90

30. This table shows the cost of canoe rental, y , based on the number of days rented, x .

Days Rented (x)	Cost (y)
2	\$25.00
3	\$37.50
8	\$100.00

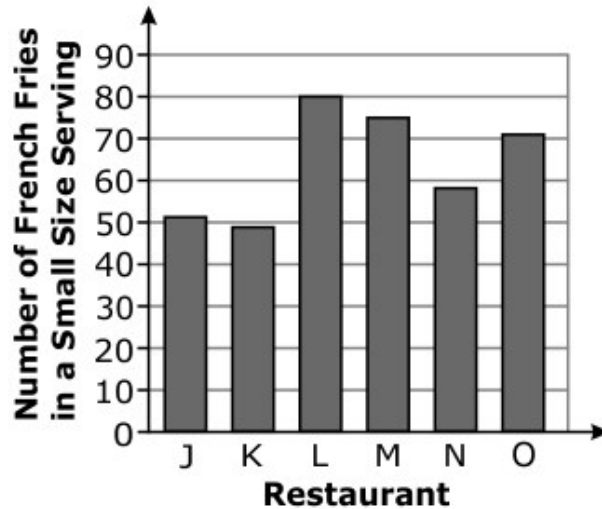
Which equation will calculate the cost of x days?

- A. $x = 12.5y$
- B. $x = 25 + y$
- C. $y = 12.5x$
- D. $y = 25 + x$
31. A football coach wants to spread grass seed over the football field.
- The football field is 110 yards by 53 yards.
 - One bag of grass seed will cover 0.25 of an acre.
 - 1 acre = 4,840 yd^2

How many bags of grass seed does the coach need to buy to cover the entire field?

- A. 3 bags
- B. 4 bags
- C. 5 bags
- D. 6 bags
32. A cruise ship can travel at a constant speed of 24 miles per hour. **Approximately** how many days will it take for the cruise ship to travel 1,200 miles?
- A. 2
- B. 3
- C. 25
- D. 50

33. This table shows data from six restaurants about the number of fries in their small serving size.



Restaurant K decides to increase the number of french fries in a small serving by 25%. **About** how many french fries are now in a small serving at Restaurant K?

- A. 56
 - B. 61
 - C. 68
 - D. 74
34. The table below shows Brian's shopping list for Wally's Supermarket.

Item	Cost
milk	\$4.99
orange juice	\$3.49
paper plates	\$4.59
bacon	\$5.99

Wally's Supermarket collects 2% sales tax on food items and 6.75% sales tax on non-food items. If Brian bought everything on his list, what is Brian's total including tax?

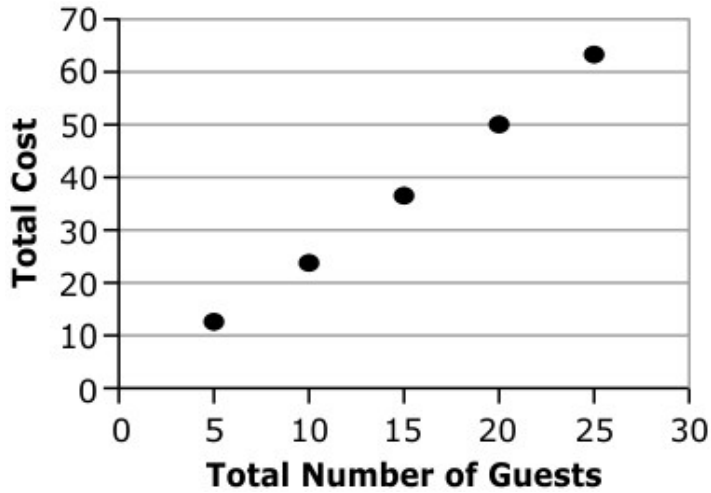
- A. \$19.44
- B. \$19.66
- C. \$20.35
- D. \$20.73

35. Janelle randomly surveyed 50 students. She found that 42 of the students had been to a music concert. There are 2,870 students at the school. Based on her survey, **about** how many students in the school have been to a music concert?
- A. 157
 - B. 2,157
 - C. 2,410
 - D. 2,820
36. Last week, a pharmacy sold a bottle of shampoo for \$5.00. This week, the shampoo sells for \$6.50. By what percent did the price increase?
- A. 30%
 - B. 37%
 - C. 48%
 - D. 150%
37. The enrollment at a local university increased from 14,000 students to 20,000 students over a six-year period. What was the **approximate** average percent increase per year in student enrollment at the university?
- A. 5%
 - B. 7%
 - C. 30%
 - D. 43%

38. Karen is planning a party. She researched two caterers. The table below shows costs at Parties Plus.

Number of People	Total Costs
10	\$37.50
25	\$93.75
30	\$112.50

The graph below shows costs at Fran's Foods.



Which statement is true about the caterers' costs?

- A. Parties Plus charges \$1.25 more per person.
 - B. Parties Plus charges \$1.75 more per person.
 - C. Fran's Foods charges \$1.25 more per person.
 - D. Fran's Foods charges \$1.75 more per person.
39. Luke bought a computer for \$525 and two computer games for \$34.99 each. The sales tax rate was 6.25%. How much sales tax was Luke charged?
- A. \$632.17
 - B. \$371.86
 - C. \$62.50
 - D. \$37.19

40. Oak City received $59\frac{9}{10}$ inches of rain in 1987. The amount of rainfall in April was $\frac{1}{6}$ of the total for the year. April has 30 days. What was the **approximate** daily average rainfall during April?
- A. 0.33 inch
 - B. 2.00 inches
 - C. 9.98 inches
 - D. 11.98 inches
41. A custodian at a high school is waxing the floors for the new school year. Each five-gallon bucket of wax will cover 1,000 ft.²
-
- How many five-gallon buckets of wax will the custodian need to wax 20 classrooms that are 20 ft by 20 ft each?
- A. 5 buckets
 - B. 6 buckets
 - C. 7 buckets
 - D. 8 buckets
42. Allie earns $\frac{3}{8}$ of a vacation day for each full week she works. At the end of how many weeks will Allie first earn more than 5 vacation days?
- A. 13
 - B. 14
 - C. 15
 - D. 16

43. This table shows the mileage of four cars.

Car	Miles per Gallon
Car W	$316\frac{4}{10}$ miles on $11\frac{2}{10}$ gallons
Car X	$391\frac{1}{4}$ miles on $12\frac{1}{2}$ gallons
Car Y	$387\frac{6}{10}$ miles on $15\frac{2}{10}$ gallons
Car Z	$421\frac{8}{10}$ miles on $14\frac{8}{10}$ gallons

Which car gets the **most** miles per gallon of gas?

- A. Car W
- B. Car X
- C. Car Y
- D. Car Z

44. Carol measured her windows for new curtains. She measured the width to be 34 inches, when it was actually 36 inches. Which was Carol's **approximate** percent error in her window measurement?

- A. 2.0%
- B. 2.8%
- C. 5.6%
- D. 5.9%

45. Emily estimated it would take her 40 minutes to run 3 miles. It actually took her 30 minutes. What was Emily's percent of error for the time she estimated to run 3 miles?

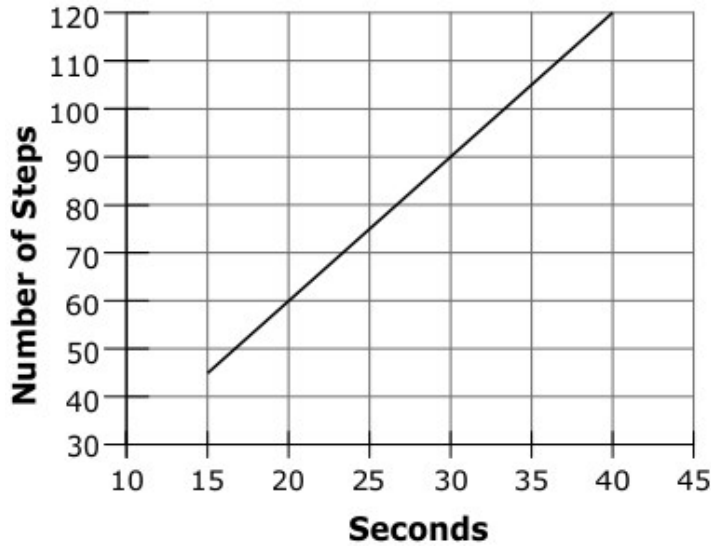
- A. 10.0%
- B. 25.0%
- C. 26.7%
- D. 33.3%

46. Ben's speedometer showed he was driving 35 miles per hour. A police car's radar showed he was actually driving 40 miles per hour. What was Ben's **approximate** percent of error in his driving speed?
- A. 5%
 - B. 6%
 - C. 13%
 - D. 14%
47. Ronald measured a chemical to be used in a science experiment. He recorded the mass as 12 mg. The accepted mass of the chemical was 11 mg. **Approximately**, what percent of the accepted mass was the difference of these measurements?
- A. 9.09%
 - B. 8.33%
 - C. 4.35%
 - D. 0.09%

48. Megan and Abigail timed themselves running. Megan recorded her number of steps in this table.

Seconds	10	14	18
Number of Steps	25	35	45

Abigail recorded her number of steps using this graph.



Who has the greater running rate and by how much?

- A. Abigail has the greater running rate by 0.5 steps per second.
 - B. Megan has the greater running rate by 0.5 steps per second.
 - C. Abigail has the greater running rate by 5 steps per second.
 - D. Megan has the greater running rate by 5 steps per second.
49. Marty sold a book online. The service charge was a 15% fee for using their website. If Marty sold the book for \$60.00, how much money will Marty receive after the fee is assessed?
- A. \$45.00
 - B. \$51.00
 - C. \$58.00
 - D. \$69.00

50. The bill for dinner at a restaurant was \$81.75. A sales tax of 7.5% was first added to the bill, and then an 18% gratuity will be added. What was the total bill for dinner?
- A. \$99.83
 - B. \$103.70
 - C. \$105.88
 - D. \$107.25
51. Chris buys copies of Sunday's newspaper for \$1.50 each. He plans to sell them for \$2.20 each.

What is the percent increase on each newspaper?

- A. 32%
 - B. 47%
 - C. 50%
 - D. 68%
52. John earns \$7.50 per hour at his job. Becky's earnings are given by the equation $P = 8.25x$, where P is her total earnings, in dollars, and x is the number of hours worked. If they each work 9 hours, who earns more and how much more?
- A. John earns \$0.75 more than Becky.
 - B. John earns \$6.75 more than Becky.
 - C. Becky earns \$0.75 more than John.
 - D. Becky earns \$6.75 more than John.

53. This table shows the number of miles a bus travels, based on the number of hours the bus is in motion.

Hours in Motion (x)	Miles Traveled (y)
3	195
4	260
5	325
6	390

Which equation represents this data?

- A. $y = 3x$
- B. $y = 3x + 195$
- C. $y = 65x$
- D. $y = x + 65$
54. Daniel's recipe for a salad dressing calls for a ratio of 2 : 1 : 1 of sugar to oil to vinegar. Daniel has $1\frac{1}{2}$ cups of sugar. How much oil will he need for the recipe?
- A. 3 cups
- B. $1\frac{1}{2}$ cups
- C. 1 cup
- D. $\frac{3}{4}$ cup
55. A water bottling machine can fill 150 bottles each minute. A case of water is 25 bottles.

If the machine runs for 3 hours, how many cases of water does it fill?

- A. 18
- B. 1,080
- C. 75,000
- D. 225,000

56. This table shows the cost to buy different amounts of apples at a store.

Pounds of Apples	Total Cost
4	\$10.24
7	\$17.92
15	\$38.40
23	\$58.88

Which equation can be used to find the cost, y , of x pounds of apples?

- A. $y = 0.16x$
- B. $y = 0.26x$
- C. $y = 1.60x$
- D. $y = 2.56x$

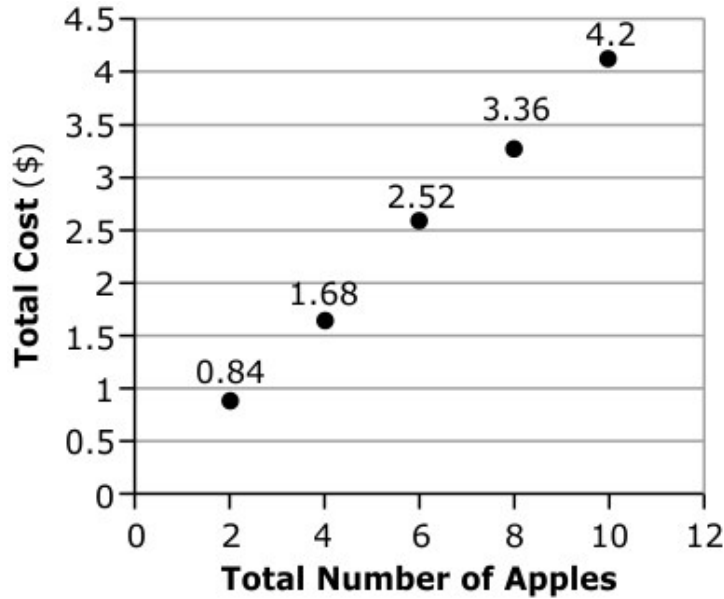
57. Adrian's pay is calculated using the equation $P = 25h$, where P is the total pay and h is number of hours worked. Mitch is paid \$32 per hour. **About** how many more hours will Adrian have to work than Mitch to earn \$1,000?

- A. 5 hours
- B. 9 hours
- C. 13 hours
- D. 20 hours

58. John’s mom compares prices of apples at two different stores. The table below shows apple prices at Gail’s Grocery.

Number of Apples	Total Cost
7	\$3.85
10	\$5.50
12	\$6.60

The graph below shows apple prices at Joe’s Fruits.



Which store charges more and by how much?

- A. Gail’s Grocery charges \$0.26 more per apple.
- B. Gail’s Grocery charges \$0.13 more per apple.
- C. Joe’s Fruits charges \$0.26 more per apple.
- D. Joe’s Fruits charges \$0.13 more per apple.

59. John bought a pair of shoes that normally costs \$79, but was on sale for 15% off. Sales tax was 8.25%. What was the total cost for the pair of shoes?
- A. \$60.63
 - B. \$70.00
 - C. \$72.25
 - D. \$72.69
60. Tanner had \$32.80 and spent 15% of his money on a book including tax. If he paid with a \$5 bill, how much change did Tanner get back?
- A. \$0.08
 - B. \$4.92
 - C. \$9.92
 - D. \$27.88
61. Last year the golf team paid \$275 for travel expenses. The budget for this year was reduced to \$205 for travel expenses. What was the **approximate** percent decrease for travel expenses?
- A. 25%
 - B. 34%
 - C. 70%
 - D. 75%
62. Andie earns \$1,175.93 for every two weeks that she works. If one pay period covers 5 weeks of work, **about** how much will Andie's paycheck be?
- A. \$470.37
 - B. \$823.15
 - C. \$2,351.86
 - D. \$2,939.83

63. Patricia is planning a trip to the United Arab Emirates. She has determined that the exchange rate is 3.67 dirhams for every U.S. dollar. **Approximately** how many dirhams will Patricia receive for 5,000 U.S. dollars?
- A. 23,500 dirhams
 - B. 18,350 dirhams
 - C. 1,350 dirhams
 - D. 150 dirhams

64. The table below shows data from a survey asking 250 people how they got their news.

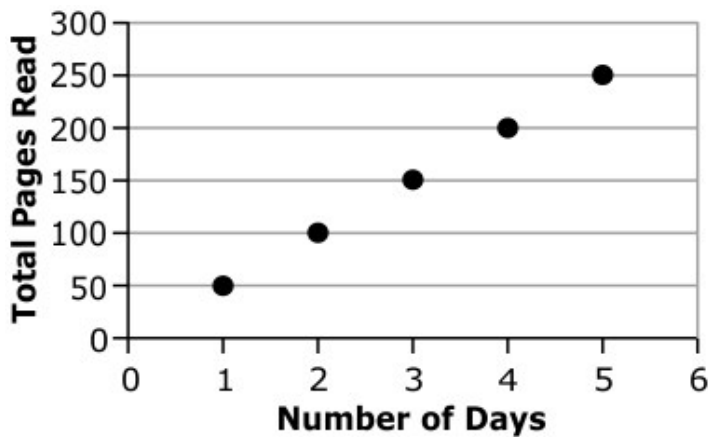
Type of News	Number of Responses
Television	102
Social media	27
Newspaper	83
News website	38

Based on the table, how many people out of 5,000 are expected to get their news from a newspaper?

- A. 83
 - B. 1,250
 - C. 1,660
 - D. 2,075
65. Kim's car tires were filled to a pressure of 32 pounds per square inch. One of Kim's tires had a small leak and now has a pressure of 28.5 pounds per square inch. What is the **approximate** percent decrease in the tire pressure?
- A. 12.3%
 - B. 10.9%
 - C. 9.1%
 - D. 3.9%

66. The number of people attending a school play increased from 291 on Friday to 334 on Saturday. What was the **approximate** percent increase in attendance at the school play?
- A. 10%
 - B. 15%
 - C. 25%
 - D. 45%

67. Alice and Laura are in a book club. Alice reads 50 pages in 2 days. The graph below shows the total number of pages Laura reads after a certain number of days.



Which statement is true about the number of pages Alice and Laura read each day?

- A. Alice reads half as many pages per day as Laura.
- B. Alice reads twice as many pages per day as Laura.
- C. Laura reads 5 times as many pages per day as Alice.
- D. Alice and Laura read the same amount of pages per day.

68. Jimmy borrowed \$17,000 from the bank for the purchase of a van. The loan is for 6 years and charges 7% simple interest. What is Jimmy's **approximate** monthly payment over the life of the loan?
- A. \$335
 - B. \$295
 - C. \$253
 - D. \$236
69. Julie planned to walk 35 miles a week. On Monday and Wednesday she walked 5 miles each. Tuesday and Thursday she walked 3 miles each. Friday she walked 2 miles, Saturday she walked 7 miles, and Sunday she walked 4 miles. She failed to reach her goal. What was Julie's **approximate** percent error?
- A. 17.1%
 - B. 20.7%
 - C. 40.0%
 - D. 66.7%
70. At a car dealership, salespeople earn a 5% commission on the first \$10,000 of every sale, plus a 3% commission on any amount over \$10,000. A salesperson sold a car for \$12,300. What was the total commission on the sale?
- A. \$369
 - B. \$569
 - C. \$615
 - D. \$984

71. Sarah has been selling boxes of cookies for three years. The first year, she sold 200 boxes of cookies. The second year, she sold 10% more boxes of cookies than the first year. The third year, she sold 20% more boxes of cookies than the second year. How many boxes of cookies did Sarah sell for all three years?
- A. 684 boxes
 - B. 660 boxes
 - C. 484 boxes
 - D. 264 boxes
72. A bicycle is on sale for 20% off. The bicycle regularly costs \$129.95. What is the sale price?
- A. \$103.96
 - B. \$109.95
 - C. \$127.35
 - D. \$132.55
73. In 2005, Mia's family spent \$5,820 on groceries. In 2004, the family spent \$5,330 on groceries. What is the **approximate** percent increase in the amount spent on groceries from 2004 to 2005?
- A. 7.9%
 - B. 8.4%
 - C. 9.2%
 - D. 9.7%
74. A store owner puts some items on sale for 25% off the original price. He then lowers the price again by 10% off the sale price for these items. How much is the total discount off the original price?
- A. 65%
 - B. 35%
 - C. 32.5%
 - D. 27.5%

75. A car originally cost \$16,000. The owner reduced the price of the car by 20%. After a few weeks, the owner reduced the price of the car by another 20%. Belinda then purchased the car. If a 3% sales tax was added, how much did Belinda pay for the car?
- A. \$9,600.80
 - B. \$9,888.20
 - C. \$10,240.00
 - D. \$10,547.20

76. This table shows David's total savings, s , and the number of weeks, w , he has saved money.

Week (w)	Amount of Savings (s)
2	\$4.00
3	\$6.00
4	\$8.00
5	\$10.00

Which equation can be used to determine David's total savings after w weeks?

- A. $s = 10w$
 - B. $s = 4w$
 - C. $s = 2w$
 - D. $s = \frac{1}{2}w$
77. Becky borrowed \$580.00 from the bank. The loan had a 13.5% simple annual interest rate, and she paid off the bill over 18 months. What was the total amount, including interest, Becky paid for the loan?
- A. \$611.50
 - B. \$697.45
 - C. \$987.45
 - D. \$1,409.40

78. The table below shows the data from several hitters during the baseball season.

Name	Number of Times at Bat	Number of Home Runs
Bill	72	6
Mark	56	8
Sam	54	6
Tom	40	5

Based on this data, who had the highest percentage of home runs per times at bat?

- A. Bill
- B. Mark
- C. Sam
- D. Tom

79. A balloon at a temperature of 240 K is filled with 16 cubic meters of a gas. The volume of a gas is directly proportional to its temperature. What is the volume of a balloon if the temperature rises to 330 K?

- A. 20 cubic meters
- B. 22 cubic meters
- C. 24 cubic meters
- D. 26 cubic meters

80. Gina deposited \$5,450 in a savings account that earns a simple interest rate of 4.7% annually. If Gina keeps the money in the account for 18 months, making no more deposits or withdrawals, **approximately** how much money will be in her account at the end of 18 months?

- A. \$10,060
- B. \$5,834
- C. \$4,610
- D. \$384

81. In August, a grocery store averaged about 820 customers per day. In September, the average number of customers per day at the store was 975. What was the **approximate** percent increase in the average number of customers per day from August to September?
- A. 16%
 - B. 19%
 - C. 84%
 - D. 119%
82. In a proportional relationship, r is the dependent variable and s is the independent variable. Which equation represents a proportional relationship if k is the constant of proportionality?
- A. $s = \frac{k}{r}$
 - B. $r = \frac{k}{s}$
 - C. $s = k r$
 - D. $r = k s$
83. Brenda went to 10 houses in her neighborhood and asked each family if they went to the movie theater at least once a year. Of these families, 6 said that they had gone to the movies in the last year.

Based on this information, how many families, out of 100 in her town, go to the movie theater at least once a year?

- A. 40 families
- B. 60 families
- C. 84 families
- D. 90 families

84. Three different flower shops sell a dozen roses at regular price for \$29.89. Shop *M* offers a \$10.00 off coupon. Shop *N* has a half-price sale. Shop *P* has a 55% off sale. Which flower shop has the lowest price?
- A. Shop *M*
 - B. Shop *N*
 - C. Shop *P*
 - D. All three shops charge the same sale price
85. In one class, 6 out of 20 students received an A on their projects. Based on this information, if 180 students did the same project, how many students **most likely** received an A?
- A. 20
 - B. 30
 - C. 36
 - D. 54
86. The value of y is proportional to the value of x . If $y = 18$ when $x = 3$, what is y when $x = 4$?
- A. 24
 - B. 19
 - C. 11
 - D. 2
87. A shirt on sale for 10% off the original price was then reduced by an additional 30% off the sale price. After both price reductions, the shirt cost \$25.60, before sales tax. What was the original price of the shirt?
- A. \$65.60
 - B. \$42.67
 - C. \$40.63
 - D. \$35.84

88. Mike deposited \$145.00 into his savings account on Sunday. On Thursday, he had \$95.00 left in his savings account. On Saturday, he had \$70.00 left in the account. What is the rate of change of the account?
- A. \$37.50 per day
 B. \$12.50 per day
 C. -\$12.50 per day
 D. -\$37.50 per day
89. Alia buys a computer. The original price of the computer is \$379.99. She uses a coupon for 15% off any item. She must pay 6.75% sales tax on the sale price. How much money will Alia spend on the computer?
- A. \$301.19
 B. \$329.74
 C. \$344.79
 D. \$407.49
90. Juan asked 15 students how long they studied for a test. The results are shown in this table.

Number of People	Time Spent Studying (in minutes)
3	90
5	60
7	45

Juan asked 30 more students and found that the same percentage of students studied 45 minutes. How many people in the second group studied 45 minutes?

- A. 6
 B. 7
 C. 10
 D. 14

91. A pre-election survey showed that 2 out of every 5 voters would vote in an election. At this rate, how many people would be expected to vote if there are 16,000 voters in a city?
- A. 3,200
 - B. 6,400
 - C. 9,600
 - D. 12,800
92. Ted invested his money for 5 years in an account that earns 5% simple interest. He earned \$325 in interest. How much did Ted originally invest?
- A. \$1,300
 - B. \$1,625
 - C. \$3,250
 - D. \$6,500
93. The ratio of boys to girls enrolled in summer camp is 3 : 2. Forty youth are attending summer camp.
-
- How many boys are attending the summer camp?
- A. 16 boys
 - B. 21 boys
 - C. 24 boys
 - D. 25 boys
94. An amusement park found that 5 out of 8 visitors rode a certain roller coaster more than once on the same day. There were 12,480 visitors to the amusement park on Monday. Based on this information, how many visitors rode the roller coaster more than once on Monday?
- A. 7,800 visitors
 - B. 4,800 visitors
 - C. 2,500 visitors
 - D. 1,600 visitors

95. Kyle's house has a taxable value of \$139,000. His property tax rate is 0.25%. How much will Kyle have to pay in property taxes?
- A. \$347.50
 - B. \$556.00
 - C. \$3,475.00
 - D. \$5,560.00
96. The values of w and z are proportional. If w is $\frac{1}{4}$ when z is 12, and w is the independent variable, what is the constant of proportionality?
- A. $\frac{1}{48}$
 - B. $\frac{1}{3}$
 - C. 3
 - D. 48
97. A magazine mailed a survey to 3,975 subscribers. Twenty-six percent of the subscribers answered the survey. **About** how many people answered the survey?
- A. 1,800 people
 - B. 1,500 people
 - C. 1,000 people
 - D. 900 people
98. The regular price of a coat is \$32.00. It is on sale at 25% off. The sales tax is 6.5%. What is the final cost of the coat?
- A. \$23.98
 - B. \$24.16
 - C. \$25.56
 - D. \$39.60

99. Travis bought a pair of shoes that originally cost \$74.99. The shoes were on sale for 20% off, and sales tax was 7%. **Approximately** how much did the shoes cost after sales tax?
- A. \$63.79
 - B. \$64.19
 - C. \$65.24
 - D. \$66.99
100. A test contains 28 multiple-choice questions and some open-ended questions. If 70% of the test questions are multiple-choice and the rest of the questions are open ended, how many open-ended questions are on the test?
- A. 7 questions
 - B. 12 questions
 - C. 22 questions
 - D. 40 questions