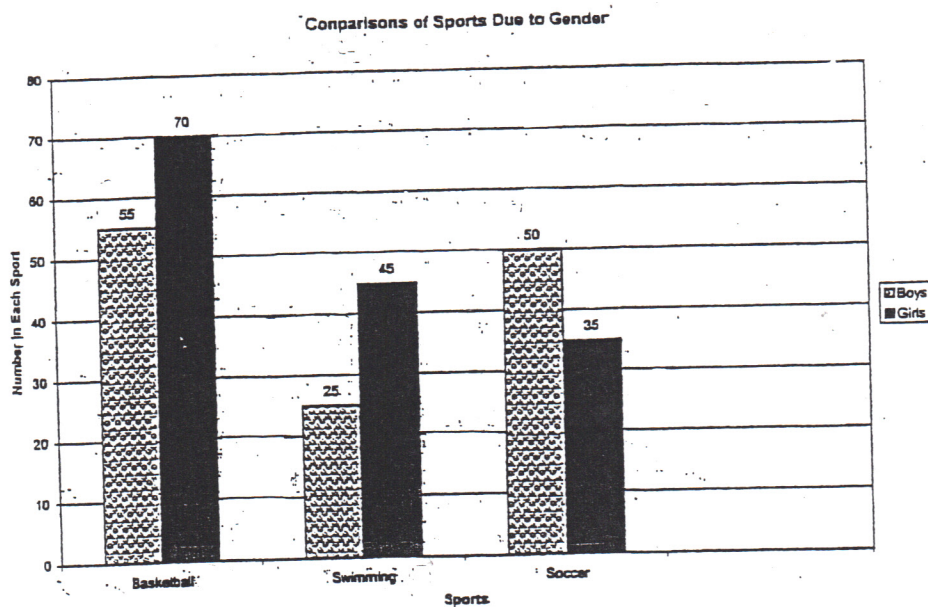


Math Bowl – Problem solving, data analysis

1. Using the graph below, what percent of students are involved in a sport that does not use a ball?



55
70
25
45
50
35
280 students

45
25
70 swim

$$\frac{70}{280} = \frac{1}{4} = 25\%$$

2. Mr. Tran, a foreign diplomat, is traveling to Moscow. $\frac{4}{5}$ the way to Moscow his private jet has 260 liters of fuel left in its tank. If he needs a total of 215 liters of fuel from home to Moscow, how much fuel will Mr. Tran have left after completing the round-trip journey to Moscow and back home for his Mathematics briefing?

$$215 \div 5 = 43 \text{ liters to use for } \frac{1}{5} \text{ to Moscow}$$

$$+ \frac{215}{5} \text{ liters to go back home}$$

$$258$$

$$260 - 258 = 2 \text{ liters}$$

3. Josh and Joel are robotics graduate students at the Massachusetts Institute of Technology. If one robot requires 3 batteries to function, how many robots can be powered with 217 batteries?

$$\begin{array}{r} 72 \\ 3 \overline{) 217} \\ \underline{21} \\ 7 \\ \underline{6} \\ 1 \\ \underline{0} \\ 0 \end{array}$$

72

One-Step Equation Word Problems

- 1) Lisa is cooking muffins. The recipe calls for 7 cups of sugar. She has already put in 2 cups. How many more cups does she need to put in?

5

- 2) At a restaurant, Mike and his three friends decided to divide the bill evenly. If each person paid \$13 then what was the total bill?

$$\begin{array}{r} 13 \\ \times 4 \\ \hline 52 \end{array}$$

- 3) How many packages of diapers can you buy with \$40 if one package costs \$8?

$$\frac{40}{8} = 5$$

- 4) Last Friday Trevon had \$29. Over the weekend he received some money for cleaning the attic. He now has \$41. How much money did he receive?

$$\begin{array}{r} 41 \\ - 29 \\ \hline 12 \end{array}$$

- 5) Last week Julia ran 30 miles more than Pranav. Julia ran 47 miles. How many miles did Pranav run?

$$\begin{array}{r} 47 \\ - 30 \\ \hline 17 \end{array}$$

- 6) How many boxes of envelopes can you buy with \$12 if one box costs \$3?

4

- 7) Amanda and her best friend found some money buried in a field. They split the money evenly, each getting \$24.28. How much money did they find?

$$\begin{array}{r} 24.28 \\ \times 2 \\ \hline \$ 48.56 \end{array}$$

- 8) Jenny wants to buy an MP3 player that costs \$30.98. How much change does she receive if she gives the cashier \$40?

\$9.02

- 9) Last Friday Adam had \$22.33. Over the weekend he received some money for cleaning the attic. He now has \$32. How much money did he receive?

$$\begin{array}{r} 32.00 \\ - 22.33 \\ \hline \$ 9.67 \end{array}$$

- 10) After paying \$5.12 for a salad, Norachai has \$27.10. How much money did he have before buying the salad?

$$\begin{array}{r} 27.10 \\ - 5.12 \\ \hline \$ 32.22 \end{array}$$

- 11) A recipe for cookies calls for $3\frac{1}{4}$ cups of sugar. Amy has already put in $3\frac{1}{9}$ cups. How many more cups does she need to put in?

$$\frac{5}{36}$$

- 12) Your mother gave you \$13.32 with which to buy a present. This covered $\frac{3}{5}$ of the cost. How much did the present cost?

$$13.32 = \frac{3}{5} x$$

- 13) If the weight of a package is multiplied by $\frac{5}{7}$ the result is 40.5 pounds. Find the weight of the package.

$$\frac{5}{7} x = 40.5$$

$$x = 56.7$$

- 14) A stray dog ate 12 of your muffins. That was $\frac{3}{10}$ of all of them! With how many did you start?

$$\frac{12}{x} = \frac{3}{10}$$

Kuta Software - Infinite Algebra 1

Distance - Rate - Time Word Problems

- 1) An aircraft carrier made a trip to Guam and back. The trip there took three hours and the trip back took four hours. It averaged 6 km/h on the return trip. Find the average speed of the trip there.
- 2) A passenger plane made a trip to Las Vegas and back. On the trip there it flew 432 mph and on the return trip it went 480 mph. How long did the trip there take if the return trip took nine hours?

$$6 \times 4 = 24$$

$$24 \div 3 = 8$$

$$\begin{array}{r} 480 \\ \times 9 \\ \hline 4320 \end{array}$$

$$\frac{4320}{432} = 10 \text{ h}$$

Name: _____

Averages: Word Problems

Clayton plays basketball on a team. He has played three games so far. In the first game, he scored 10 points. In the second game, he scored 14 points. In the third game, he scored 6 points. What is Clayton's average points per game?

answer: 10

$$\frac{10+14+6}{3} = \frac{30}{3} = 10$$

Mandy earns money by delivering groceries. She earned \$4 on Monday, \$7 on Tuesday, \$5 on Wednesday, \$4 on Thursday, and \$5 on Friday. What is the average amount of money Mandy earned per day?

answer: \$5

$$\frac{4+7+5+4+5}{5} = \frac{25}{5} = 5$$

Jean loves to go birdwatching. One day, she saw 7 birds. The next day, she saw 11 birds. The next day, she saw no birds. What is the average number of birds Jean saw each day?

answer: 6

$$\frac{7+11+0}{3} = \frac{18}{3} = 6$$

Harley read 5 books in January, 8 books in February, 4 books in March, and 7 books in April. What is the average number of books Harley read per month?

answer: 6

$$\frac{5+8+4+7}{4} = \frac{24}{4} = 6$$