

Name _____

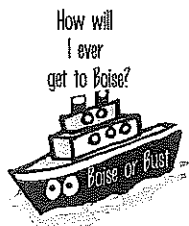
1. Compute: $98,765 \times 42 =$

2. Eighteen of the U.S. states border the Atlantic or Pacific Ocean. What percent of the states do not have an ocean border?

3. Which operation should be done last when solving this equation?

$$73 \div 6(5 - x) - 55 = 300$$

4. Sara picks a USA state name at random. What are the odds in favor of the result being a state whose name begins with *North* or *New*?



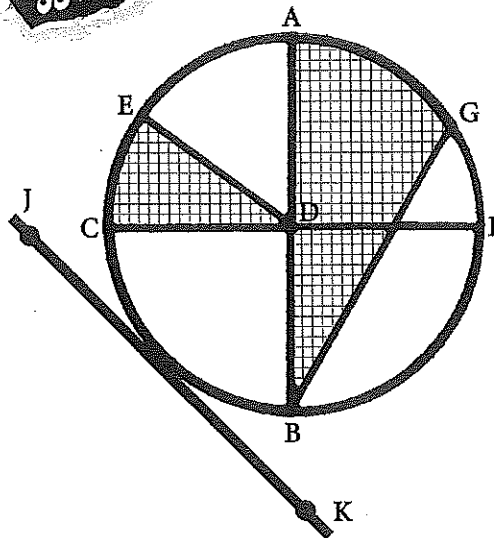
5. Identify these properties of a circle:

a. Name two central angles.

b. Name two radii.

c. Name a chord that is not a diameter.

d. Name a tangent.

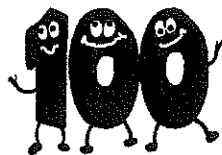


Name _____

1. The 2000 U.S. census counted 50,500 Americans over the age of 100. It is estimated that there will be 834,000 over 100 by the year 2050. What is the percent of increase?

- 1,550% 165%
 0% 150% 15.5%

We love birthdays!



5. The Gateway Arch in St. Louis, MO is the tallest monument constructed in the United States. Measure the picture to find the arch's height at the highest point.

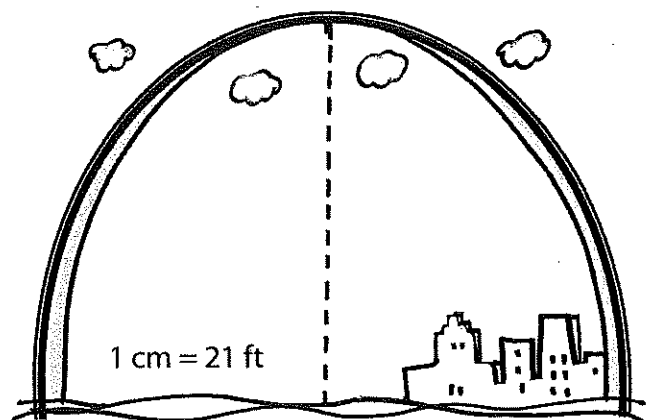
2. Write this number in scientific notation.

374,000,000

3. Use words to write this equation.

$$4(10 - y) = -8$$

4. Compute: $\$356.39 \times 12 =$



Name _____

1. A box holds raincoats for cave visitors. There are 35 yellow coats, 12 red coats, 10 green coats, and 3 black coats. Jon grabs two coats from the box. What is the probability that he'll get two red coats?

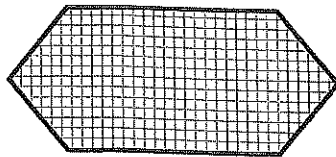


Sometimes I'm all wet.

2. Compute: $-2,000 \times 39.5 =$

3. Some friends hiked six straight days in the Mammoth Cave system. They hiked 2.6 mi on Monday, 2.9 mi on Tuesday, and 3.2 mi on Wednesday. Predict the distance they will hike on Saturday.

4. How many lines of symmetry can be drawn through this figure?



5. Is the equation a good choice for solving this problem?

Caving (the recreational sport of exploring caves) is an adventure that is growing in popularity. When Anne, Dan, and Stan added up the individual times they had spent in caves, the total came to 12,000 hours. Anne spent twice as many hours caving as Stan and Dan together. Dan and Stan found that they had spent exactly the same amount of time. How much time did Dan spend caving?

$$2s + s + s = 1,200$$

Name _____

1. Gouffre de la Pierre St. Martin is one of the world's deepest caves—1.6 km. Lou and Sue explore the cave to a depth of 800 meters. Write a ratio showing the comparison of this to the total depth of the cave.



2. Compute: $\frac{2}{3} \times \frac{4}{5} =$

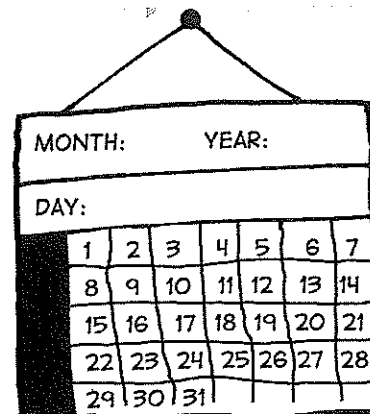
3. Which object of caving equipment would weigh about two grams?

- helmet adult boots bottle of water
 Band-Aids energy bar flashlight
 batteries raincoat ropes

4. If $x = -5$, what is y ?

$$10x + 3y = -5$$

5. Granny Bantle hiked through Angel's Cave on March 23, 1996. At the time, she was 72 years, 5 months old. In what month and year was Granny born?



Write your answers here.

Name _____

1. Estimate the quotient.

**one hundred sixty-two thousand
divided by seventy-five**

3. Compute:

$$7(900 + 15,000 - 2,000) =$$

2. The total measurement of a pair of two supplementary angles is

- 360° 45°
- 90° 180°

4. What is the value of the expression if $n = -10$?

$$5n^2 + n - 250$$

- a. -240 c. -760
- b. 240 d. 760

5. Challenge Problem

Four cavers hike single file through the cave. Their names are Zach, Anna, Carly, and Sam. How many different permutations are there for this group of hikers?

Write all the possibilities, using the first letters of the names (Z, A, C, S).



PERMUTATIONS