

6th

1. Round the number to the nearest hundred.

**23,749** \_\_\_\_\_

2. Which description matches this expression?

**$2(14 + n)$**

- the product of a number and 14
- the sum of 14 and a number
- twice the sum of 14 and a number
- a number divided by 14

3. What does this mean?

Scientists say that the probability of Nevado del Ruiz erupting is 100 percent.

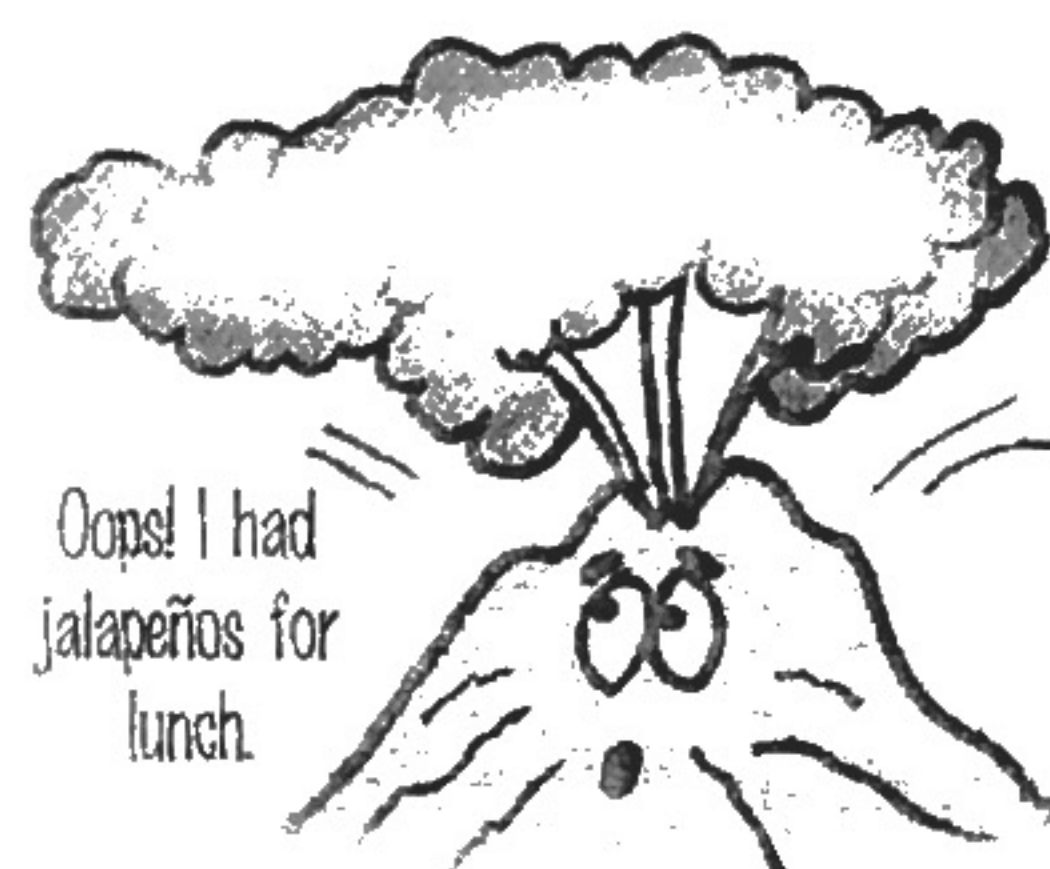
4. List three attributes of a square.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

5. The top of the volcano is 425 feet above sea level. The base of the volcano is 654 feet below sea level.

a. What is the height of the volcano?  
Draw a diagram that supports your answer.

~~b. What can you infer about the location of the volcano?~~



1. Express the decimal as a percent.

**.75**

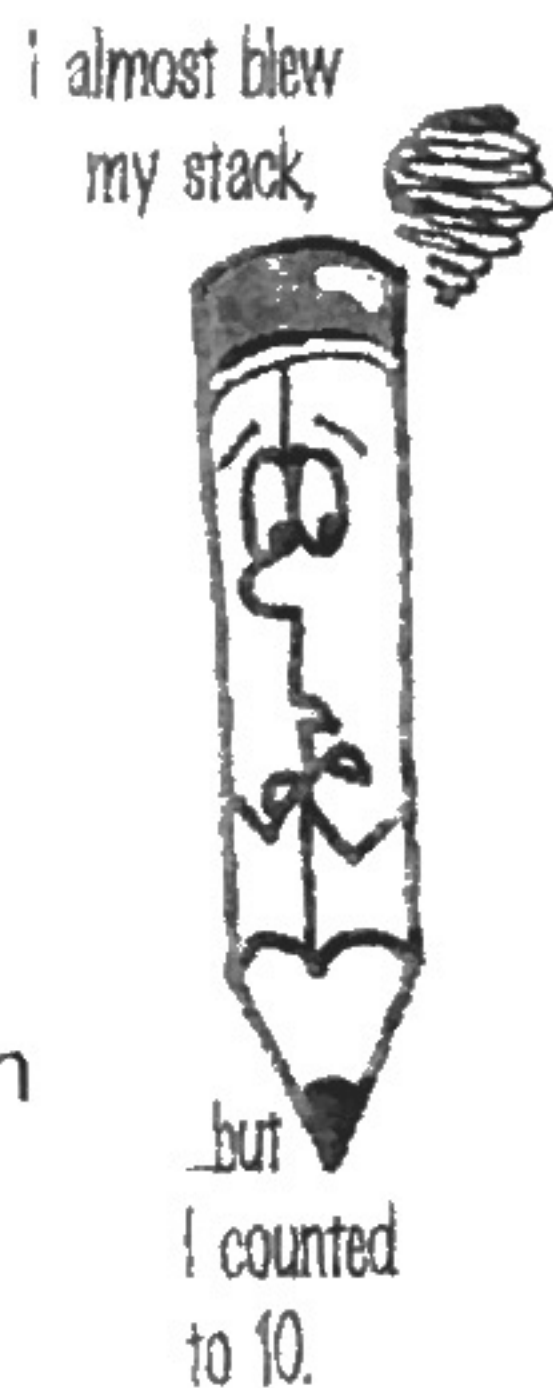
2. Choose the correct property.

**$a + (b + c) = (a + b) + c$**

- commutative property of addition
- associative property of multiplication
- associative property of addition

3. Mount St. Helens erupted in 1980 and in 2005. How many years were there between the eruptions?

4. Mount Fuji's last eruption was in 1708. How many years between Mount St. Helens' last eruption and Mount Fuji's last eruption?



5. Professor Vulcan started doing things from his to-do list at 6:00 a.m. If he takes a 25-minute break after inspecting the volcano vents, when will he finish his work?

**TO-DO LIST:**

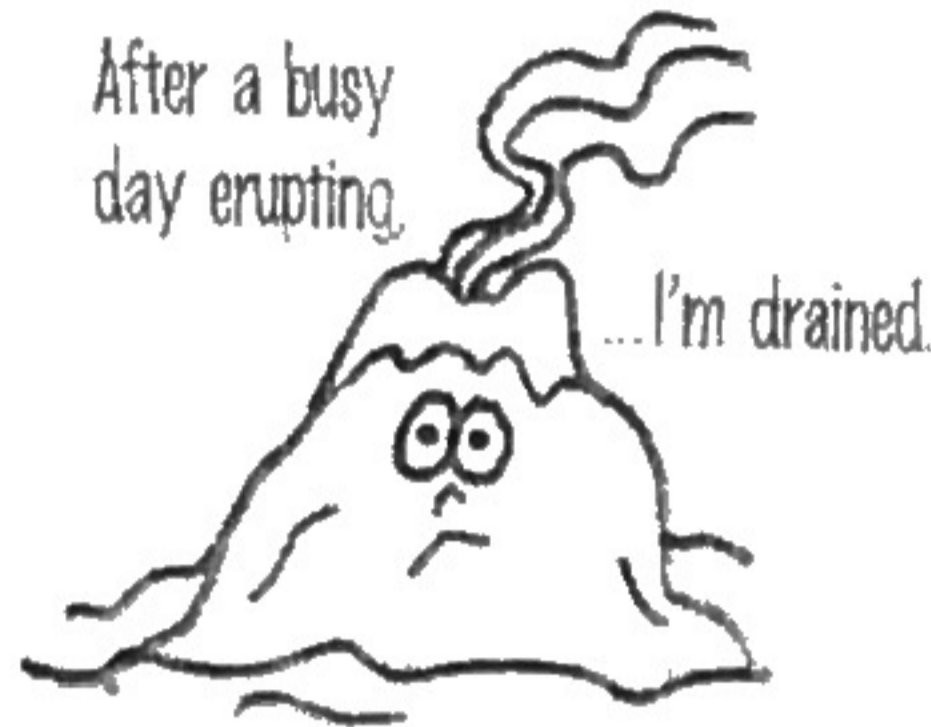
- CHECK SEISMIC READINGS.....50 MIN.
- INSPECT VOLCANO VENT.....40 MIN.
- ANSWER PHONE CALLS.....10 MIN.



Name \_\_\_\_\_

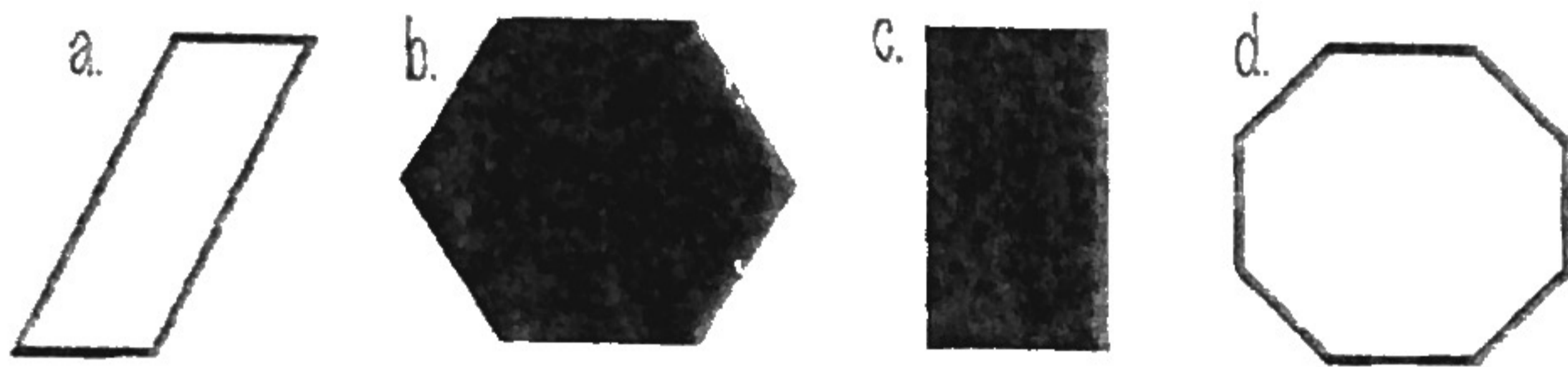
- Solve the equation.  $x + 2 = 7$
- Choose the number that is not a multiple of 5.  
 40     75     64     15

- What are the factors of 81?



- Match the shapes to the correct labels.

\_\_\_\_\_ rectangle    \_\_\_\_\_ parallelogram  
 \_\_\_\_\_ octagon    \_\_\_\_\_ hexagon



- Choose the best strategy for solving the problem.

Three scientists take temperature readings each day. The chart represents the amount of time their observations take.

Scientist A	1 hour, 35 minutes
Scientist B	1 hour, 10 minutes
Scientist C	55 minutes

What is the average length of a reading?

- Add the hours together. Add the minutes together. Divide by 3.
- Change the hours to minutes and add the times together. Divide by 3.
- Add the reading times together and subtract 3.

Name \_\_\_\_\_

- Write in simplest form.  $4\frac{3}{8} - 1\frac{5}{16} =$  \_\_\_\_\_
- Calculate the difference between a hot oven and the lava formed in a continent volcano.

**The temperature of lava depends on its composition. If it is the sort of lava that forms in undersea volcanoes, it is about 1200 degrees Celsius. If it is the sort of lava that forms on continent volcanoes it is cooler, only around 800 degrees Celsius. Your oven at home can go up to only about 250 degrees Celsius!**

- Choose the problem that will result in the greatest quotient.  
  $0.082 \div 4$                         $0.82 \div 8$   
  $0.824 \div 12$                         $8.2 \div 10$

- Circle the facts you need to solve the problem.  
**While on vacation, Paul visited an inactive volcano. He collected samples of pumice. Pumice is a light, porous volcanic rock that forms during explosive eruptions. If Paul collects 24 pieces a day for two weeks, how many pieces will he have in his collection?**

- Fill in missing values on the table.

Explain how the number of zeros in the standard form of a power of 10 relates to the exponent.

Power	Standard Form
$10^1$	10
$10^2$	100
$10^3$	1,000
$10^4$	a.
$10^b$	c.
$10^d$	e.