

SUNSHINE MATH - 7  
Neptune, XXVI

Name: \_\_\_\_\_

*This shows my own thinking.)*

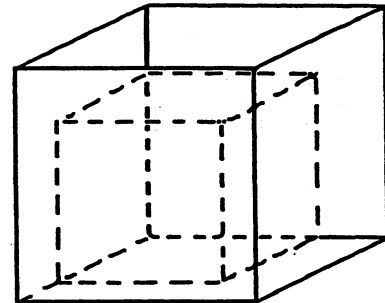
- ★★ 1. Using 4 fours with any operations or grouping symbols, write an expression that has a value of 6.

$$4 \quad 4 \quad 4 \quad 4 = 6$$

Answer: \_\_\_\_\_

- ★★★ 2. If a cube whose edge is 4 inches is placed inside of a cube whose edge is 5 inches, what percent of the space inside the larger cube is filled by the smaller cube?

Answer: \_\_\_\_\_ %



- ★★ 3. A baseball team won 6 out of 12 games and then won the next 6 games. What percent of their games did they win?

Answer: \_\_\_\_\_ %

- ★★ 4. On the school track, four laps make a mile. Mark ran 6 laps in 12 minutes. At this rate how long would it take him to run a mile?

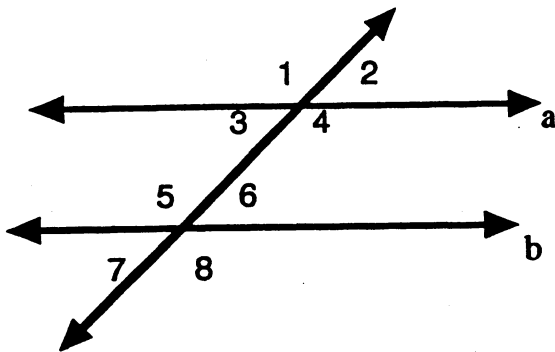
Answer: \_\_\_\_\_ minutes

- ★ 5. If a quart of ice cream is split equally among 4 people, what fraction of a gallon will each person get?

Answer: \_\_\_\_\_ of a gallon



- ★★★ 6. In the diagram below, lines a and b are parallel. If angle 1 measures 120° find the measures of angles 2, 3, 4, 5, 6, 7, & 8. Record them in the chart below.



Angle	Measure	Angle	Measure

- ★★★★ 7. On a TV game show there are 3 doors. The grand prize is behind one of them. If you appear on the show for 2 days in a row, what is the probability that you will pick the door with the grand prize both days?

Answer: \_\_\_\_\_

- ★★★ 8. Human hair grows at an average rate of 2.5 millimeters per week. Suppose that today is your 13th birthday and you have not cut your hair since you were born. Estimate how long your hair would be in meters today.



Answer: \_\_\_\_\_ meters

- ★★★★ 9. Someone once asked Marilyn vos Savant, who is the smartest person in the world, this question:

*Suppose the earth were smooth, and you could wrap a 25,000-mile-long metal belt snugly around it. Now let's say you lengthen the band by 10 feet, loosening it just a little. What would be the largest thing that could slither under the new band? An amoeba, a worm, a snake, or an alligator?*

What was her answer?

Answer: \_\_\_\_\_