

Be sure to show all of your work and label your answer. Do your best thinking!

1 Use a calculator to find each quotient.

What pattern do you see?

$$2.1 \div 3 = \underline{\hspace{2cm}}$$

$$2.01 \div 3 = \underline{\hspace{2cm}}$$

$$2.001 \div 3 = \underline{\hspace{2cm}}$$

$$2.0001 \div 3 = \underline{\hspace{2cm}}$$

$$2.00001 \div 3 = \underline{\hspace{2cm}}$$

2 Jacob has an arithmetic machine. When he puts the number 9 into the machine, the number 81 comes out. What does the machine do?

3 When two numbers are added, the sum is 13. When **the same two numbers** are multiplied, the product is 40. What are the two numbers?

$$\square + \square = 13$$

$$\square \times \square = 40$$

4 Kayla bought a bunch of grapes. She ate  $\frac{1}{2}$  of the grapes. Then her friend Chrissy ate  $\frac{3}{4}$  of the remaining grapes. There were 4 grapes left. How many grapes were there to begin with?

5 Divide this figure into thirds (3 equal parts).

