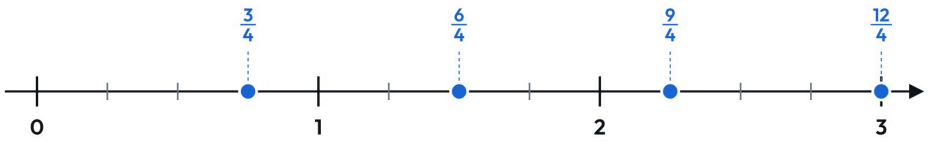
Name _____ Date _____

Is the Quotient Greater or Smaller?

Example



How many times does $\frac{3}{4}$ fit into 3? Exactly 4 times, so $3 \div \frac{3}{4} = 4$.

The quotient 4 is **greater** than the number 3 we divided. Dividing **does not always** give a smaller number.

1 IN PAIRS First predict: will the quotient be greater than the first number, equal to it or smaller? Then work it out and check.

quotient	prediction (circle)	answer	prediction right?
$12 \div 2$	**greater / equal / smaller**		☐
$12 \div 1$	**greater / equal / smaller**		☐
$12 \div \frac{1}{2}$	**greater / equal / smaller**		☐
$12 \div \frac{3}{2}$	**greater / equal / smaller**		☐
$\frac{3}{4} \div 3$	**greater / equal / smaller**		☐
$\frac{3}{4} \div \frac{1}{4}$	**greater / equal / smaller**		☐
$\frac{2}{5} \div \frac{4}{5}$	**greater / equal / smaller**		☐
$\frac{5}{6} \div 1$	**greater / equal / smaller**		☐

Names (pair) _____ Date _____

Remember

When we divide a number by a number **less than 1**, the quotient is greater than that number (a small part fits many times). When we divide it by 1, it does not change. When we divide it by a number **greater than 1**, the quotient is smaller.

2 ON YOUR OWN Without calculating, write <, > or =.

$8 \div \frac{2}{3} \bigcirc 8$ $5 \div \frac{5}{4} \bigcirc 5$ $\frac{3}{7} \div 1 \bigcirc \frac{3}{7}$ $\frac{9}{10} \div \frac{9}{10} \bigcirc \frac{9}{10}$ $4 \div \frac{1}{100} \bigcirc 4$

$\frac{2}{3} \div 3 \bigcirc \frac{2}{3}$

3 IN PAIRS Which story matches $2 \div \frac{1}{2}$? Circle the letter and work it out.

A We share two pizzas into two equal parts. How much pizza is in each part?

B We have 2 litres of juice and pour it into $\frac{1}{2}$-litre bottles. How many bottles do we fill?

C What is half of two cakes?

Answer: ☐

Make up your own story for $3 \div \frac{1}{4}$.

The Number Line app · otooly.com/number-line

Split the whole into quarters, turn on **Jumps** and enter 3. How many jumps of $\frac{1}{4}$ does it take to reach 3?

★ ON YOUR OWN **Exit card.** Without calculating: is $10 \div \frac{2}{5}$ greater or smaller than 10? Why?