

Divide a Unit Fraction by a Whole Number

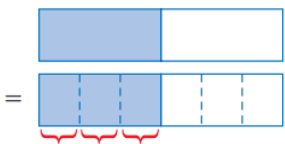
1. Write a story context to illustrate three of the following problems:

a) $\frac{1}{2} \div 4$ b) $\frac{1}{3} \div 5$ c) $\frac{1}{3} \div 4$ d) $\frac{1}{2} \div 5$

2. Determine each quotient using a diagram. Show and explain your work.

3. Use the relationship between multiplication and division to check your work.

Example: $\frac{1}{2} \div 3$ A jug of water is $\frac{1}{2}$ full. If 3 children equally share the water, what fraction of the full jug does each child get?



To solve this problem I drew a rectangle and shaded $\frac{1}{2}$. I drew a congruent rectangle and divided each half into 3 equal pieces. I shaded $\frac{3}{6}$ of this rectangle to represent the 3 children. Each child will get one shaded piece or $\frac{1}{6}$ of the full jug of water.

$$\frac{1}{2} \div 3 = \frac{1}{6} \quad \text{or} \quad \frac{1}{6} \times 3 = \frac{1}{2}$$