

Divide a Whole Number by a Unit Fraction

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

a) $6 \div \frac{1}{4}$ b) $5 \div \frac{1}{2}$ c) $4 \div \frac{1}{8}$ d) $8 \div \frac{1}{3}$

2. For each problem:

- find the answer
- draw a picture to prove your answer
- use multiplication to reason about whether your answer makes sense

Example: $4 \div \frac{1}{8} = ?$ A bowl holds 4 cups of rice. If I use a measuring cup that holds $\frac{1}{8}$ of a cup, how many times will I need to fill the measuring cup in order to fill the entire bowl?

Think: How many $\frac{1}{8}$'s are in 4? A whole has $\frac{8}{8}$ so 4 wholes would be $\frac{8}{8} + \frac{8}{8} + \frac{8}{8} + \frac{8}{8} = \frac{32}{8}$

I created 4 boxes. Each box represents 1 cup of rice. I divided each box into eighths to represent the size of the measuring cup.



My answer is the number of small boxes, which is 32. That makes sense since $4 \times 8 = 32$.