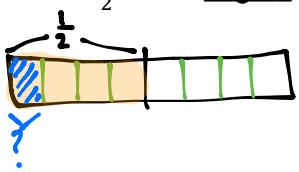
Name _____ Date _____

1. Solve and support your answer with a model or tape diagram. Write your quotient in the blank.

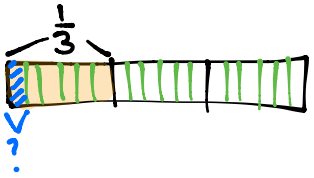
a. $\frac{1}{2} \div 4 =$ $\frac{1}{8}$



1 half ÷ 4
= 4 eighths ÷ 4
= 1 eighth

$\frac{1}{2} \div 4 = \frac{1}{8}$

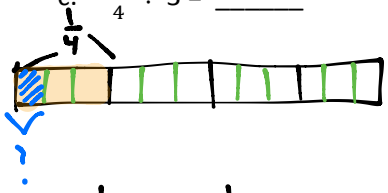
b. $\frac{1}{3} \div 6 =$ _____



1 third ÷ 6
= 6 eighteenths ÷ 6
= 1 eighteenth

$\frac{1}{3} \div 6 = \frac{1}{18}$

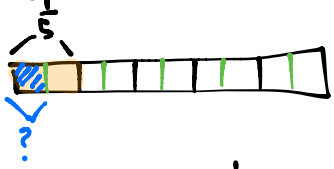
c. $\frac{1}{4} \div 3 =$ _____



1 fourth ÷ 3
= 3 twelfths ÷ 3
= 1 twelfth

$\frac{1}{4} \div 3 = \frac{1}{12}$

d. $\frac{1}{5} \div 2 =$ _____



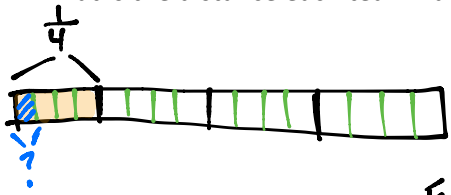
1 fifth ÷ 2
= 2 tenths ÷ 2
= 1 tenths

$\frac{1}{5} \div 2 = \frac{1}{10}$

2. Divide. Then multiply to check.

a. $\frac{1}{2} \div 10$ $\frac{1}{2} \div 10 = \frac{1}{20}$ $\frac{1}{20} \times 10 = \frac{10}{20} = \frac{1}{2}$ ✓	b. $\frac{1}{4} \div 10$ $\frac{1}{4} \div 10 = \frac{1}{40}$ $\frac{1}{40} \times 10 = \frac{10}{40} = \frac{1}{4}$ ✓	c. $\frac{1}{3} \div 5$ $\frac{1}{3} \div 5 = \frac{1}{15}$ $\frac{1}{15} \times 5 = \frac{5}{15} = \frac{1}{3}$ ✓	d. $\frac{1}{5} \div 3$ $\frac{1}{5} \div 3 = \frac{1}{15}$ $\frac{1}{15} \times 3 = \frac{3}{15} = \frac{1}{5}$ ✓
e. $\frac{1}{8} \div 4$ $\frac{1}{8} \div 4 = \frac{1}{32}$ $\frac{1}{32} \times 4 = \frac{4}{32} = \frac{1}{8}$ ✓	f. $\frac{1}{7} \div 3$ $\frac{1}{7} \div 3 = \frac{1}{21}$ $\frac{1}{21} \times 3 = \frac{3}{21} = \frac{1}{7}$ ✓	g. $\frac{1}{10} \div 5$ $\frac{1}{10} \div 5 = \frac{1}{50}$ $\frac{1}{50} \times 5 = \frac{5}{50} = \frac{1}{10}$ ✓	h. $\frac{1}{5} \div 20$ $\frac{1}{5} \div 20 = \frac{1}{100}$ $\frac{1}{100} \times 20 = \frac{20}{100} = \frac{1}{5}$ ✓

3. Teams of four are competing in a quarter-mile relay race. Each runner must run the same exact distance. What is the distance each teammate runs?

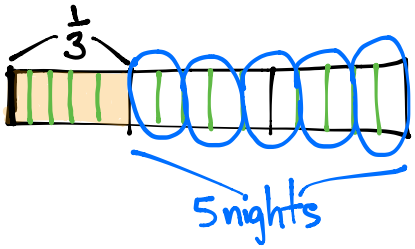


$\frac{1}{4} \div 4 = \frac{1}{16}$

Each runner will run $\frac{1}{16}$ mile.

4. Solomon has read $\frac{1}{3}$ of his book. He finishes the book by reading the same amount each night for 5 nights.

a. What fraction of the book does he read each of the 5 nights?

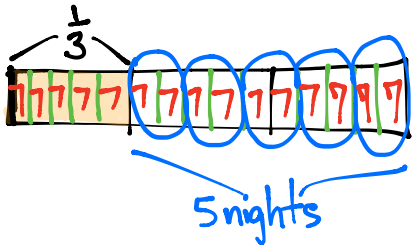


$\frac{1}{3} \div 5 = \frac{1}{15}$

10 fifteenths ÷ 5 = 2 fifteenths

Since Solomon must read 10 fifteenths in five nights, he needs to read 2 fifteenths each night.

b. If he reads 14 pages on each of the 5 nights, how long is the book?



If each night represents 14 pages, then each fifteenth is 7 pages.

1 unit = 7 pages
15 units = 105 pages

7 x 15 = 105

The book is 105 pages long.