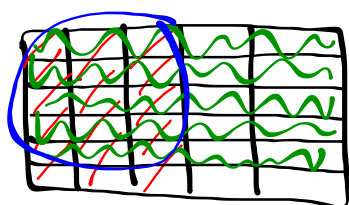


BEFORE Our Quiz

Reduce all answers

1) Use a rectangular box (grid paper) to multiply $\frac{3}{5} \times \frac{5}{6}$.Shade
completed
rows

$$\frac{15}{30} \div 15 = \frac{1}{2}$$

→ 5 top 6 side

2) Multiply and reduce the following

$$\text{a) } \frac{4}{9} \times \frac{18}{14} = \frac{72}{126} \div 2$$

. Reduce first

$$\frac{\overset{2}{\cancel{4}}}{\underset{3}{\cancel{9}}} \times \frac{\overset{2}{\cancel{18}}}{\underset{7}{\cancel{14}}} = \frac{2}{3} \times \frac{2}{7} = \frac{4}{21}$$

$$= \frac{4}{21}$$

$$= \frac{36}{63} \div 3$$

$$= \frac{12}{21} \div 3$$

$$= \frac{4}{7}$$

$$\text{b) } 3 \frac{1}{4} \times 5 \frac{1}{2}$$

Change to improper

$$\frac{13}{4} \times \frac{11}{2}$$

$$= \frac{143}{8}$$

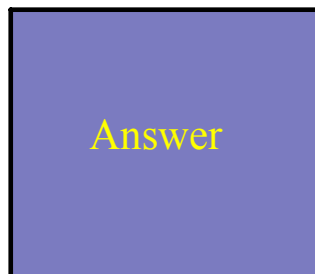
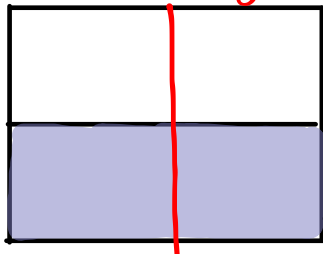
Dividing a Fraction by a Whole Number

pg. 108

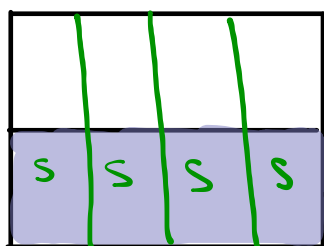
1. What fraction of a whole cake would each person get if half a cake is shared equally among :

- (a) 2 students (b) 4 students (c) 8 students (d) 3 students (e) 6 students

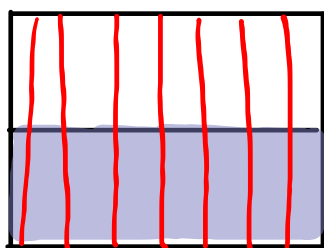
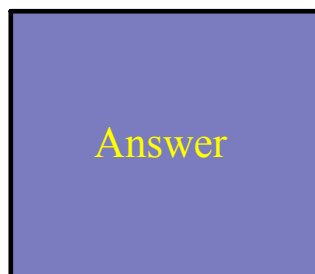
$\frac{1}{4}$ of original



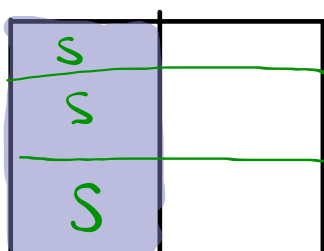
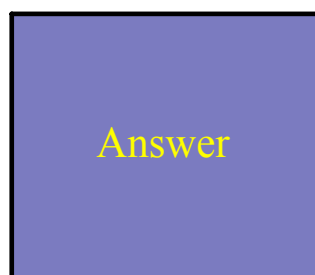
b)



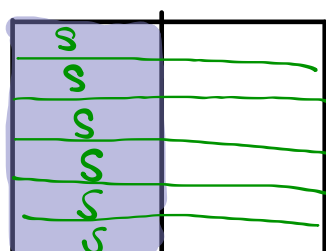
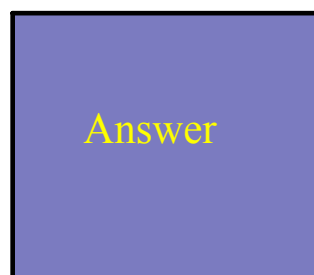
$\frac{1}{8}$



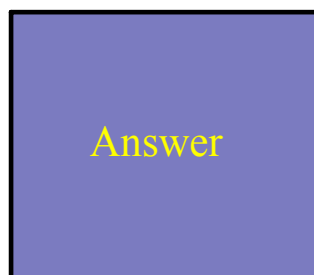
$\frac{1}{16}$



$\frac{1}{6}$



$\frac{1}{12}$



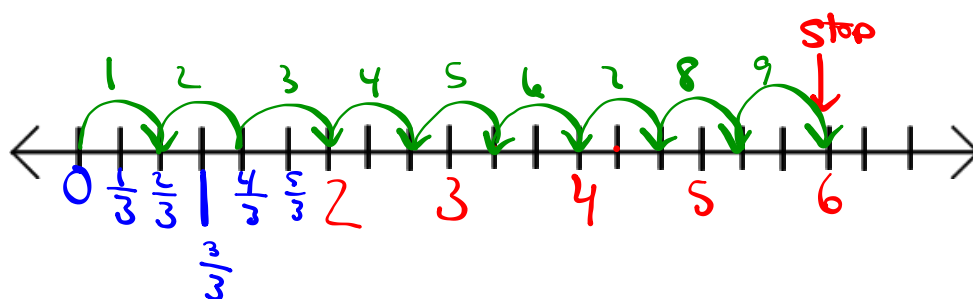
Using number lines to model

$$6 \div \frac{2}{3}$$

step 1) Draw a number line and count by the unit fraction of $\frac{1}{3}$ up until 6

step 2) Do leaps of $\frac{2}{3}$

step 3) Count the leaps ^{Full}



$$6 \div \frac{2}{3} = 9$$

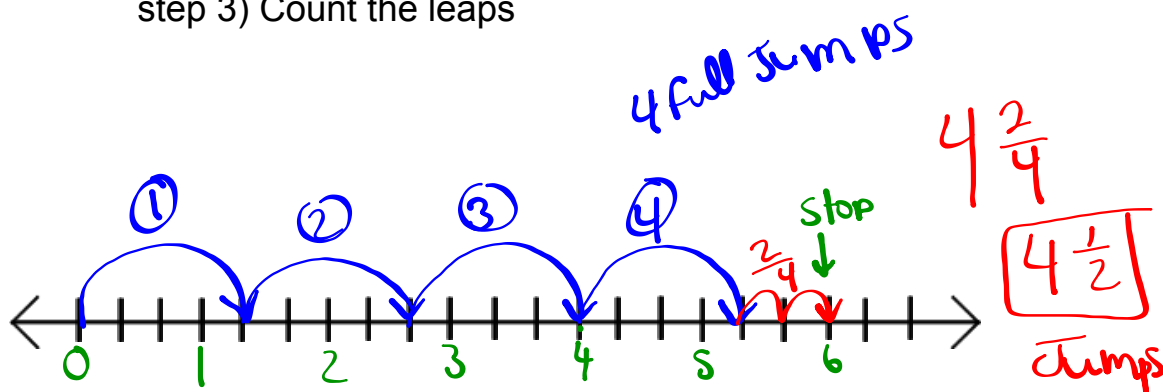
Using number lines to model

$$6 \div \frac{4}{3}$$

step 1) Draw a number line and count by the unit fraction of $\frac{1}{3}$ up until 6

step 2) Do leaps of $\frac{4}{3}$

step 3) Count the leaps



but 2 is half of 4
3 3

so only $\frac{1}{2}$ a jump
2

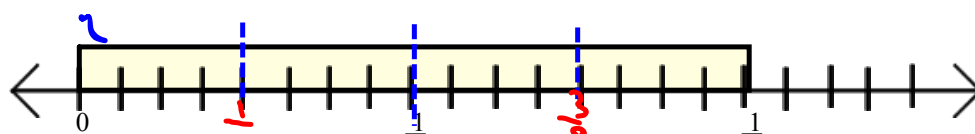
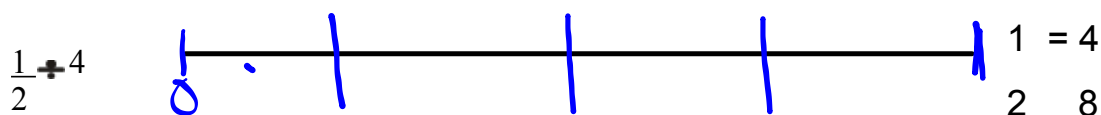
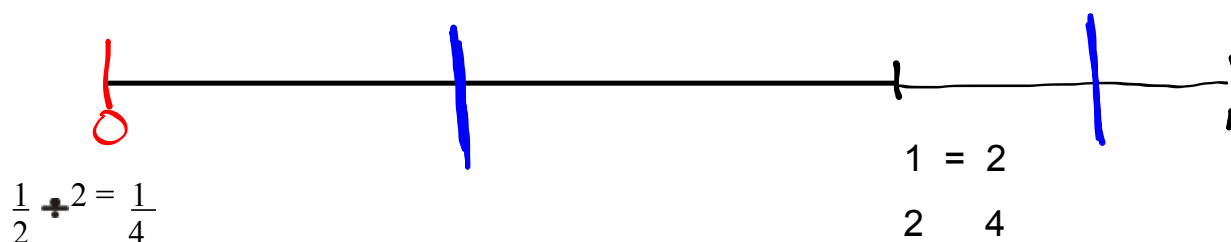
You can also use a number line to show dividing a fraction by a whole number.

step 1) Mark 0 and $\frac{1}{2}$ on the number line

$$\frac{1}{2} \div 2$$

step 2) Divide into 2 equal place

Think what the whole would be now



The number line is not as clear to most students when doing division as with some of the other operations.

unit
fraction

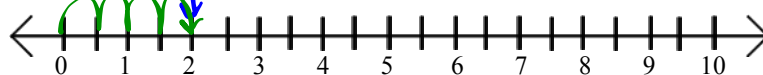
Dividing a Whole Number by a Fraction

pg. 110

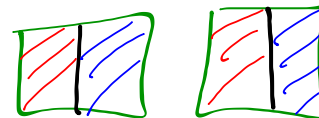
1. How many $\frac{1}{2}$ h TV programs are in each of the number of hours?

- (a) 2 (b) 3 (c) 4 (d) 5 (e) 6

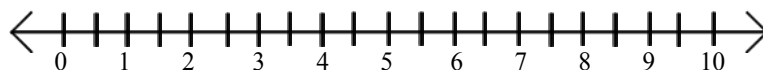
a)



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

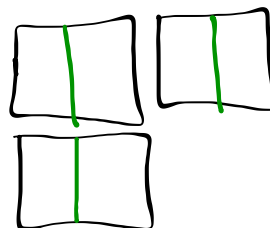


b) 3 hrs

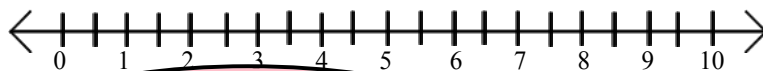


Answer $3 \div \frac{1}{2} = 6$

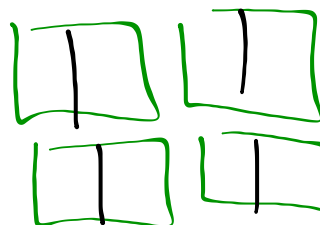
3 boxes each with 2 halves have 6 little pieces



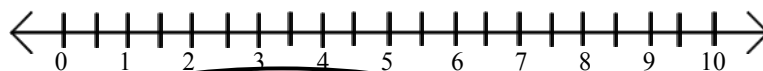
c) 4 hrs



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

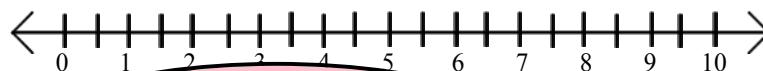


d)



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

6 hrs

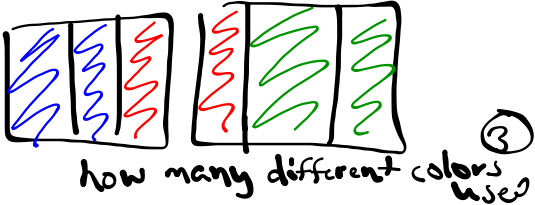
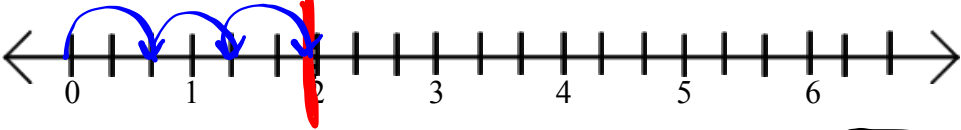


Answer $6 \div \frac{1}{2} = 12$

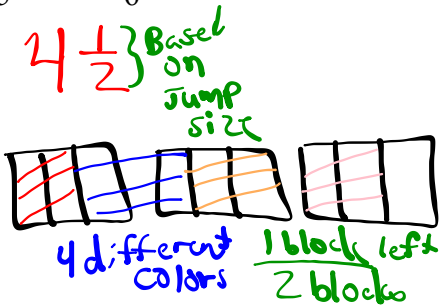
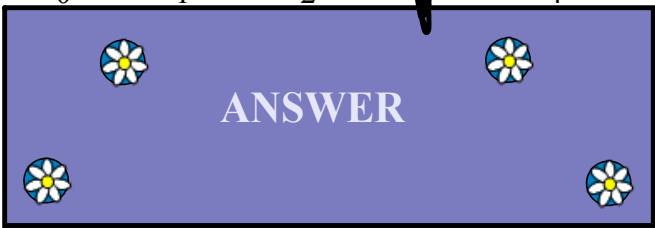
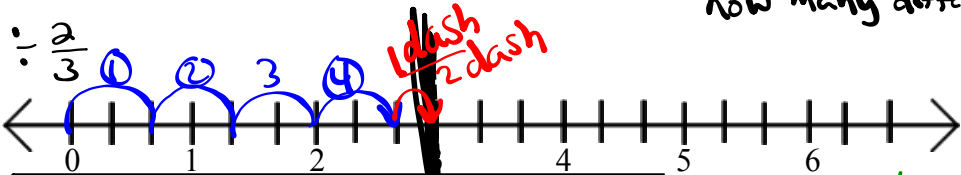
2. How many $\frac{2}{3}$ of a jar are in each number of jars?
(a) 2 (b) 3 (c) 4 (d) 5 (e) 6

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

a)



b) $3 \div \frac{2}{3}$

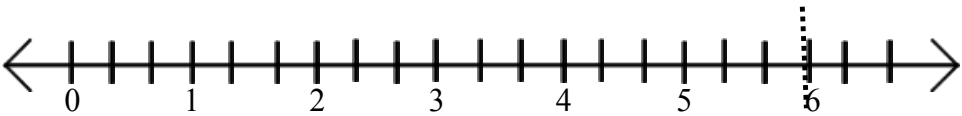
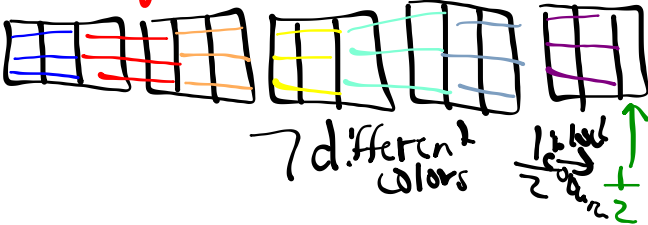
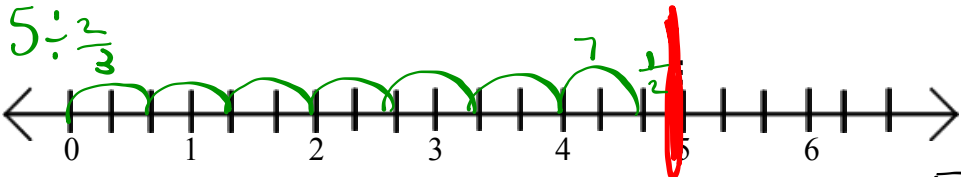


c) $4 \div \frac{2}{3} = 6$



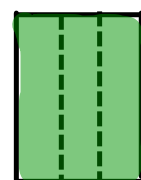
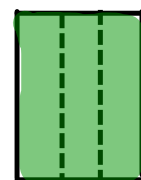
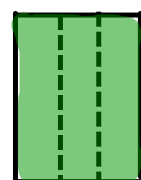
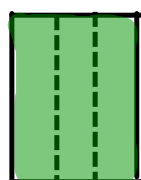
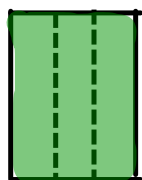
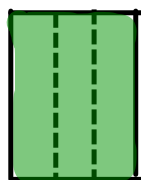
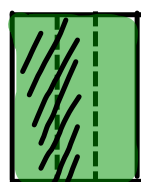
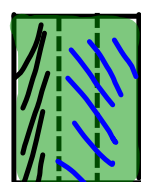
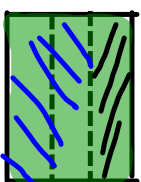
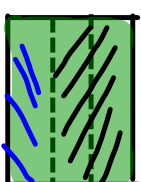
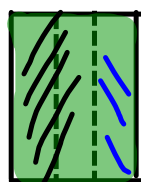
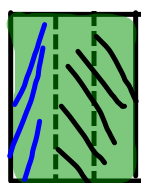
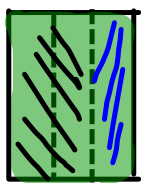
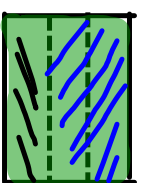
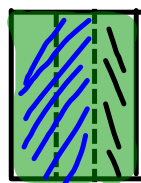
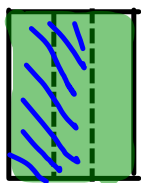
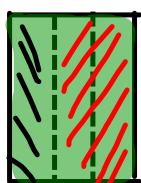
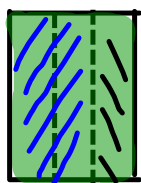
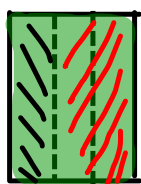
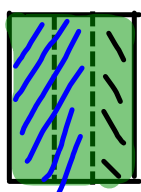
STOP

d) $5 \div \frac{2}{3}$



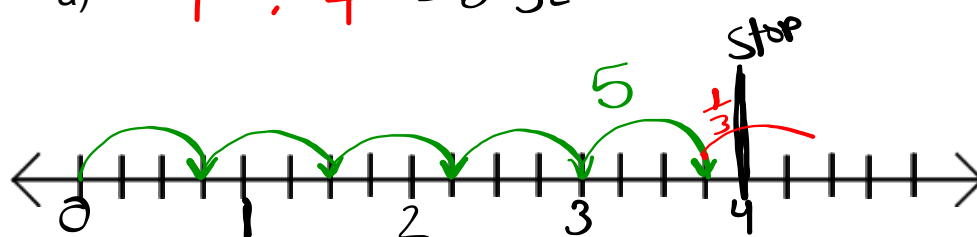
2. How many $\frac{2}{3}$ of a jar are in each number of jars?

(a) 2 (b) 3 (c) 4 (d) 5 (e) 6

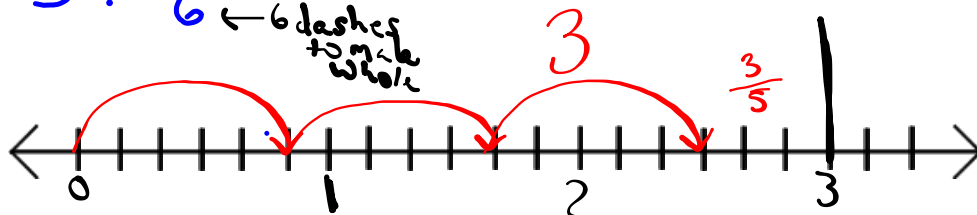


Homework pg 110 #3-5 Sheet 4, 8 #7-10
Write a rule for dividing fractions.

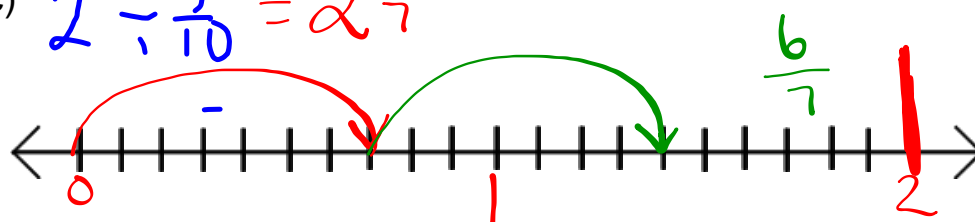
a) $4 \div \frac{3}{4} = 5\frac{1}{3}$ ← jump size count by the unit fraction



b) $3 \div \frac{5}{6} = 3\frac{3}{5}$ ← jump 5 at a time
← 6 dashes to make whole



c) $2 \div \frac{7}{10} = 2\frac{6}{7}$



$$2 \div \frac{1}{2} \Rightarrow 2 \times \frac{2}{1} = \frac{4}{1}$$

$$\frac{1}{2} \Rightarrow \frac{2}{1}$$

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

$$\frac{1}{2} \Rightarrow \frac{2}{1}$$

$$3 \div \frac{2}{3} \Rightarrow 3 \times \frac{3}{2} = \frac{9}{2}$$

$$\frac{2}{3} \Rightarrow \frac{3}{2}$$

$$5 \div \frac{2}{3} \Rightarrow 5 \times \frac{3}{2} = \frac{15}{2}$$

$$\frac{2}{3} \Rightarrow \frac{3}{2}$$

$$2 \div \frac{3}{2} \Rightarrow 2 \times \frac{2}{3} = \frac{4}{3}$$

$$\frac{3}{2} \Rightarrow \frac{2}{3}$$

$$6 \div \frac{3}{2} \Rightarrow 6 \times \frac{2}{3} = \frac{12}{3}$$

$$\frac{3}{2} \Rightarrow \frac{2}{3}$$

Class/Homework

Page 132 # 3 to 8

3 (a d)

4 ($4 \div \frac{5}{6}$) Just model & Answer
(no a, b, c, d)

5 Model & Answer

6 d, f

8 b