Warm Up Grade 8

February ~~9~~ 10, 2016

1) Multiply and reduce the following

a) $\frac{12}{35} \times \frac{21}{20}$

$= \frac{3 \times 21}{35 \times 5}$

$= \frac{3 \times 3}{5 \times 5}$

$= \frac{9}{25}$

$\frac{12 \times 21}{35 \times 20} = \frac{252}{700}$

$\frac{126}{350}$

$\frac{63}{175}$

$= \frac{9}{25}$

b) $3\frac{2}{7} \times \frac{1}{5}$

$\frac{23}{7} \times \frac{1}{5}$

$= \frac{23}{35}$

Using number lines to model

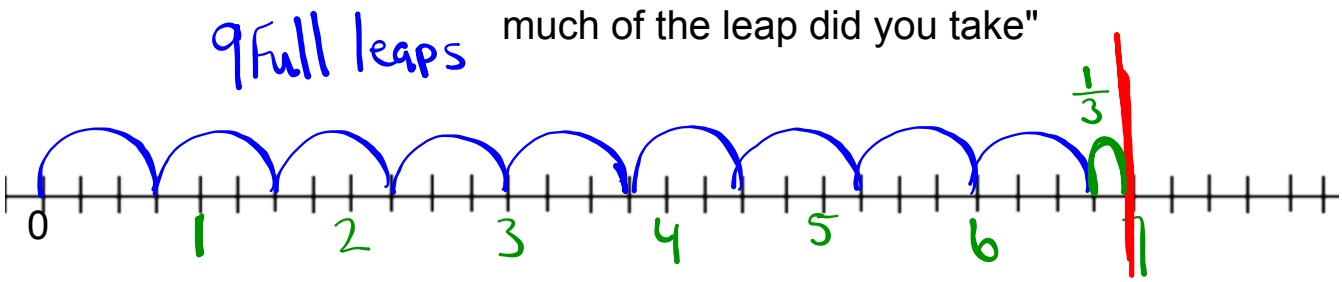
$7 \div \frac{3}{4}$

step 1) Draw a number line and count by the unit fraction of $\frac{1}{4}$ up until 7

step 2) Do leaps of 3/4

step 3) Count the leaps

* if you have partial leaps then the "how much of the leap did you take"



$7 \div \frac{3}{4} = 9\frac{1}{3}$

Using number lines to model

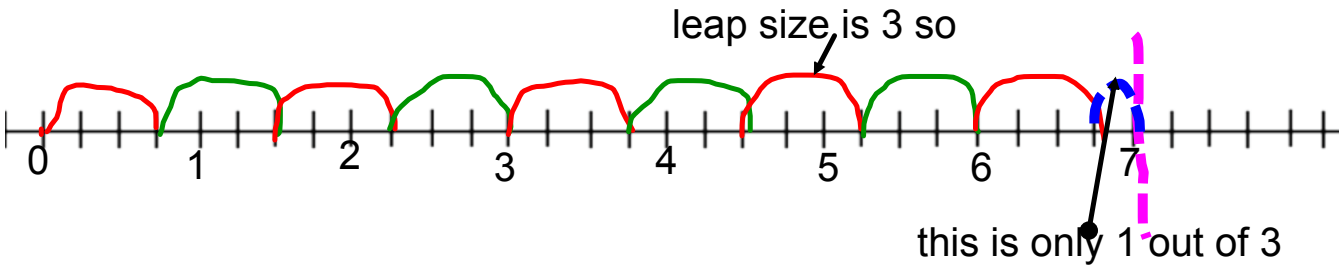
$7 \div \frac{3}{4}$

step 1) Draw a number line and count by the unit fraction of $\frac{1}{4}$ up until 6

step 2) Do leaps of 3/4

step 3) Count the leaps

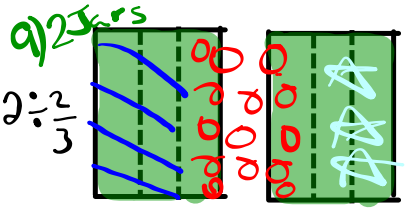
* if you have partial leaps then the "how much of the leap did you take"



$7 \div \frac{3}{4} = 9\frac{1}{3}$

2. How many 2/3 of a jar are in each number of jars? (shade)
(a) 2 (b) 3 (c) 4 (d) 5 (e) 6

a) 2 jars

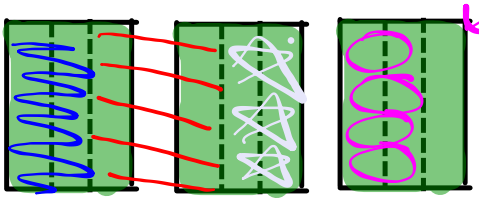


$2 \div \frac{2}{3} = 3$

draw out 2 rectangles cut in unit fraction of $\frac{1}{3}$
→ count different colours used (or shapes)

when counting you count what you coloured. (Here 2 blocks at a time are being coloured so if you don't colour in a whole then the fractions is ___)

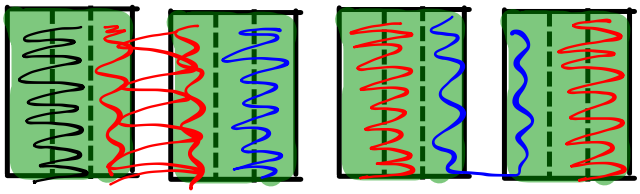
b)



1 out of 2 coloured $\frac{1}{2}$

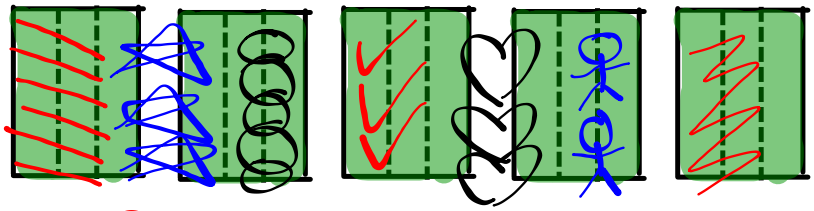
$3 \div \frac{2}{3} = 4\frac{1}{2}$

c)



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

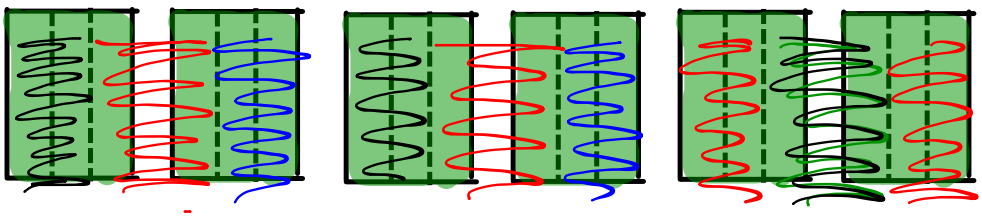
d)



$5 \div \frac{2}{3} = 7\frac{1}{2}$

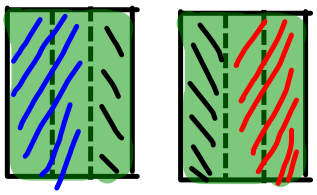
$7\frac{1}{2}$ ← what you shade; ← what you should shade each time

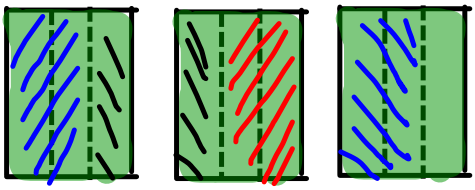
e)

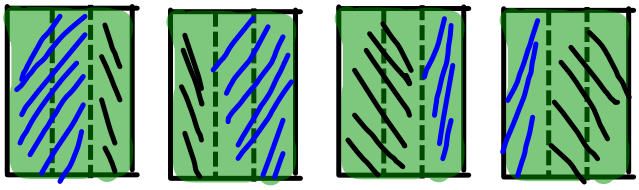


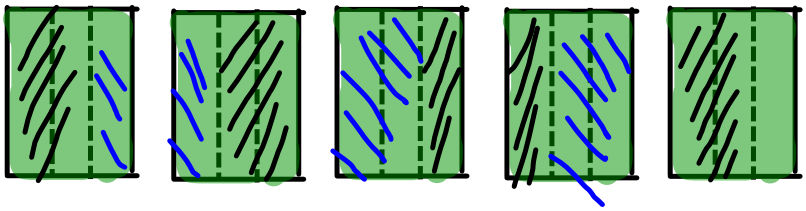
$6 \div \frac{2}{3} = 9$

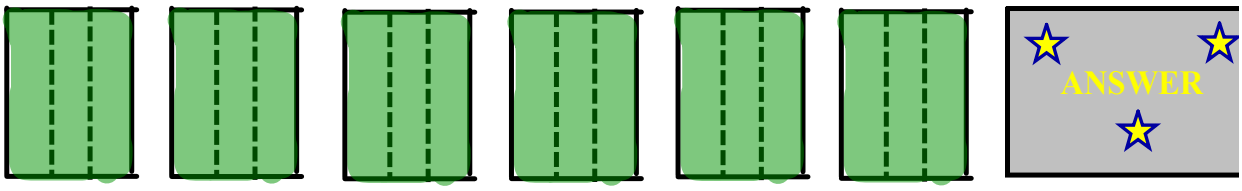
2. How many 2/3 of a jar are in each number of jars?
(a) 2 (b) 3 (c) 4 (d) 5 (e) 6







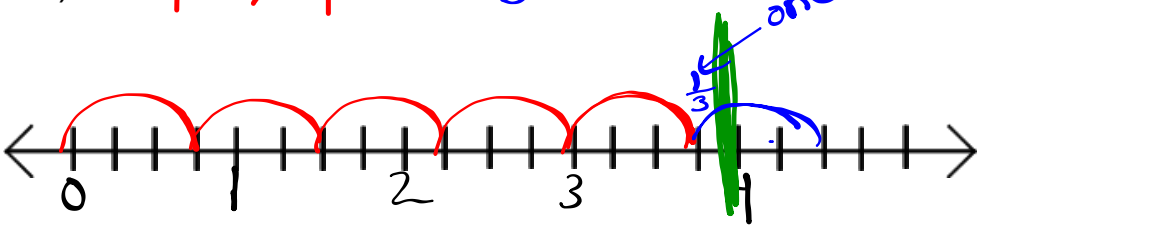




Homework pg 110 #3-5 Sheet 4.8 #7-10
Write a rule for dividing fractions.

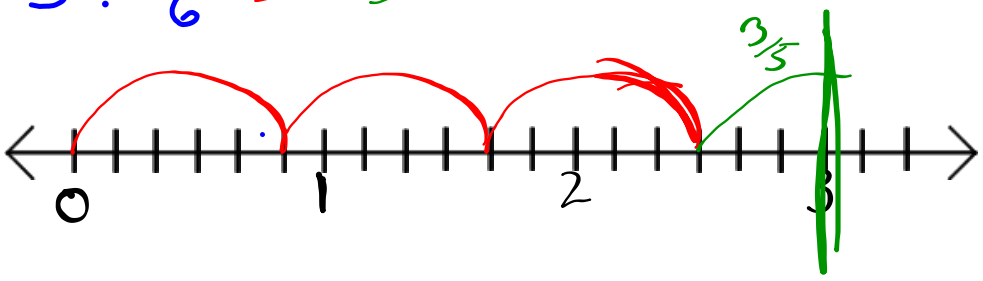
count by the unit fraction

a) $4 \div \frac{3}{4} = 5\frac{1}{3}$

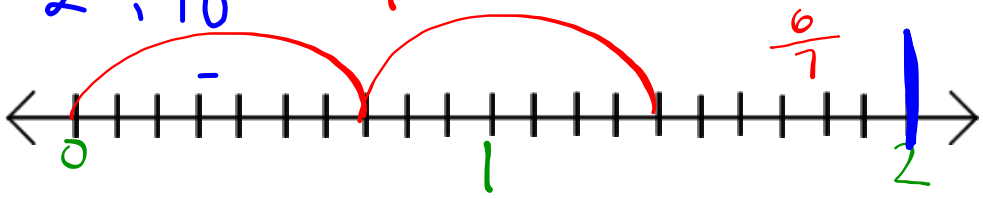


b) $3 \div \frac{5}{6} = 3\frac{3}{5}$

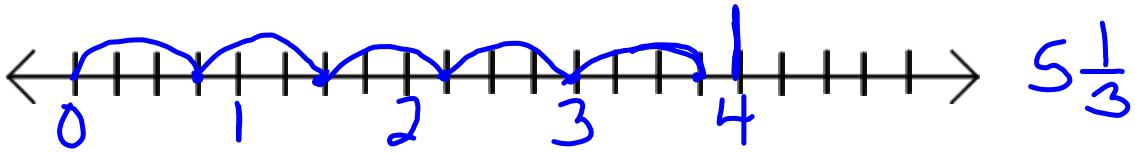
unit fraction $\frac{1}{6}$



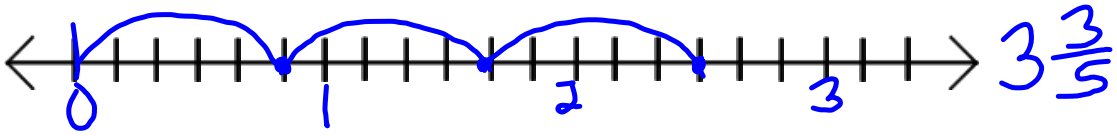
c) $2 \div \frac{7}{10} = 2\frac{6}{7}$



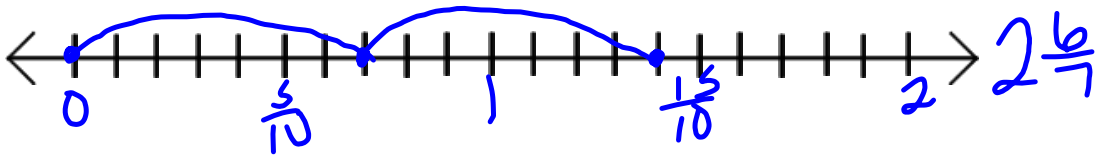
a) $4 \div \frac{3}{4}$



$3 \div \frac{5}{6}$



$2 \div \frac{7}{10}$



Homework
Pg 132 #3-10

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

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

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

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

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

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

Class/Homework

Use Fraction Rectangles or numberlines

Page 132 # 3(c,d)

#4(a,b,c,d)

#5(Use numberline),

#8(a i, ii)

#8(b, ii,)

#9(a,b)

#10(a,b,c)

Show all work

May want to use different colours