Solving ratio problems ~~strategy #1 Proportions~~

+ 4 Strategies

Proportion

Double Number Line

Tape Diagram (best for part to whole)

Connect

A snack mix recipe uses a ratio of five scoops of granola for every three scoops of candy. How many scoops will he need to make six batches?
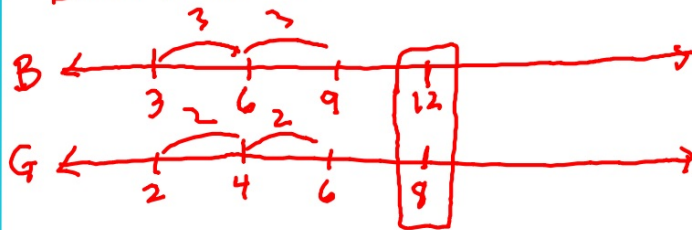
I do The ratio of boys to girls in a class is 3:2. If there are 12 boys, how many girls are there?

Proportion

$$\frac{b\ \ 3}{G\ \ 2} \overset{\times 4}{=} \frac{12}{8} \quad \times 4$$

Double Number Line
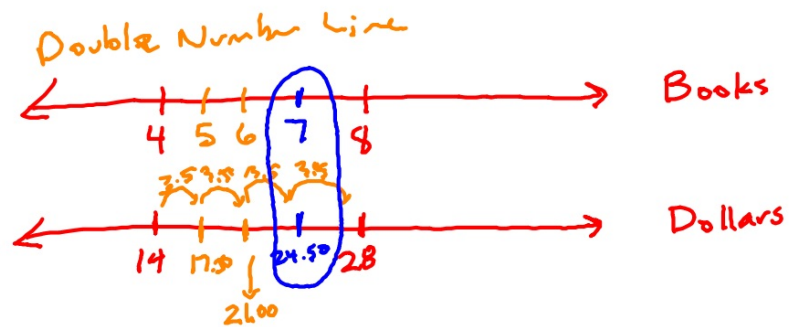

Tape Diagram

I do At discount books, 4 paperback books cost $14. How much would seven books cost?
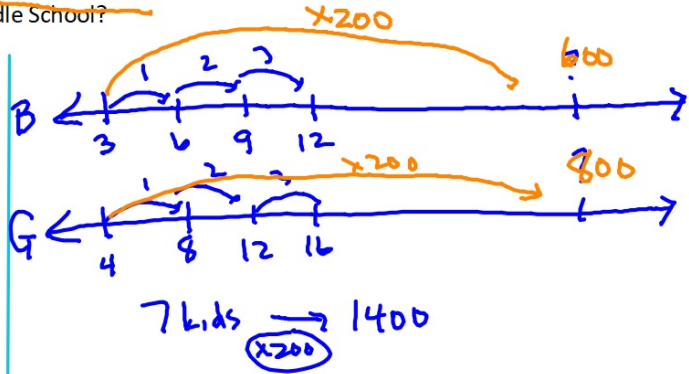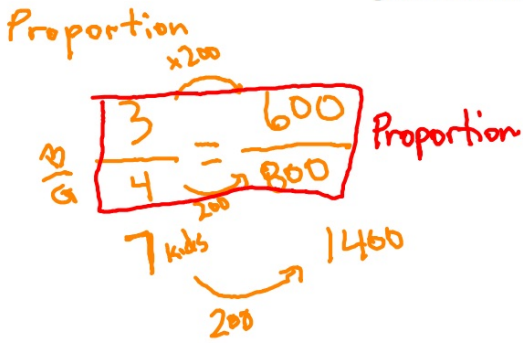
Proportion

$\frac{4}{14}$ $\xrightarrow{\times 1.75}$ $\frac{7}{24.50}$ ✓

$\times 1.75$

Double Number Line

Books: 4 5 6 7 8

Dollars: 14 17.5 24.50 28

2.50

Tape Diagram

We do

The total number of students enrolled at Berkmar Middle School is 1,400 students. If the ratio of boys to girls is also 3 to 4 for the school, how many students are boys and how many students are girls at Berkmar Middle School?

Proportion

x200

$$\frac{B}{G} \quad \frac{3}{4} = \frac{600}{800}$$ Proportion

7 kids → 1400

200

Tape Diagram

x200

B   3   6   9   12   600

G   4   8   12   16   800

x200

x200

7 kids → 1400

(x200)

You do together on whiteboard

The ratio of cats to dogs at the pet store is 6:5. If there are 55 pets at the store, how many are cats?

You do alone on index card

I found a sale on pencils: 20 for $2. I need to buy 110 pencils. How much will it cost?