2.1 Ratios

Part 1: Identify the missing number: (1 mark each)

$\dfrac{1}{3} = \dfrac{\blacksquare}{24}$	$\dfrac{4}{5} = \dfrac{48}{\blacksquare}$	$\dfrac{13.75}{1} = \dfrac{\blacksquare}{8}$	$\dfrac{6}{24} = \dfrac{\blacksquare}{12}$
$\dfrac{10}{4} = \dfrac{\blacksquare}{200}$	$\dfrac{9}{6} = \dfrac{48}{\blacksquare}$	$\dfrac{75}{1} = \dfrac{\blacksquare}{6}$	$\dfrac{16}{24} = \dfrac{\blacksquare}{2}$
$\dfrac{88}{3} = \dfrac{\blacksquare}{6}$	$\dfrac{\blacksquare}{5} = \dfrac{48}{3}$	$\dfrac{5}{\blacksquare} = \dfrac{15}{75}$	$\dfrac{\blacksquare}{400} = \dfrac{1}{8}$
$3:4 \qquad 6:\blacksquare$	$1:16 \qquad \blacksquare:128$	$\blacksquare:40 \qquad 2:5$	$2:\blacksquare \qquad 24:36$

Part 2: Find the ratios: REDUCE IF NEEDED

If the ratio of red dye to blue dye in a shade of purple is $2:3,$
how many mL of blue dye will be needed if $24mL$ of red dye is used?

You bought a package of candy that had 18 suckers. The bag contained 3 blue, 6 red, 2 yellow and 7 orange. Use RATIO NOTATION.

   a) Write the ratio of blue to orange.

   b) Write the ratio of yellow to red.

   c) Write the ratio of <u>yellow and orange</u> compared to the total amount.

You want to make cookies for the school bake sale. If your recipe calls for a ratio of sugar to flour of $3:5$, how much flour will you need if you use 4.5cups of sugar?

A hairdresser mixes brunette hair coloring for a client using $20mL$ hair color, $40mL$ color developer, $15mL$ conditioner, and $3mL$ thickener.
      Express your answers as REDUCED FRACTIONS.
   a) ratio of hair color to thickener

   b) ratio of thickener to conditioner

   c) ratio of color developer to hair color

The ratio of oil to gasoline in a weed whacker is $5:12$.
If the **total** amount of fluid used is $51L$, how many liters of each fluid are used? (hint ratio of $5:12$ gives $17L$ total)