

$$\frac{y}{15} - \frac{2}{3} = \frac{4}{5}$$

- 1) Find the lowest common multiple of 15,3 and 5. We take this step because the goal is to clear away all the fractions. Let's list the multiples of 15,3 and 5.

The multiples of 15 are : **15**, 30, 45, 60,

The multiples of 3 are: 3, 6, 9, 12, **15**, 18,..

The multiples of 5 are: 5, 10, **15**, 20...

- 2) We now see that 15 is the least common multiple of the denominators, so we multiply the whole equation by 15.

$$15\left(\frac{y}{15} - \frac{2}{3} = \frac{4}{5}\right) \quad \text{setup the multiplication by 15}$$

$$15 \cdot \frac{y}{15} - \frac{15 \cdot 2}{3} = \frac{15 \cdot 4}{5} \quad \text{distribute the 15 into the parenthesis}$$

$$\left(\frac{15}{15}\right)y - \left(\frac{15}{3}\right)2 = \left(\frac{15}{5}\right)4 \quad \text{regroup so you can divide}$$

$$y - 5 \cdot 2 = 3 \cdot 4 \quad \text{simplify by dividing}$$

$$y - 10 = 12 \quad \text{multiply}$$

$$y = 22 \quad \text{add 10 to both sides}$$