Fractions task 3- Simplifying Fractions

How do I Simplify a Fraction ?

There are two ways to simplify a fraction:

Method 1

Try to **evenly divide** (only whole number answers) both the top and bottom of the fraction by 2, 3, 5, 7 ,... etc, until we can't go any further.

Example: Simplify the fraction $\frac{24}{108}$:

$$\div 2 \qquad \div 2 \qquad \div 3$$

$$\frac{24}{108} = \frac{12}{54} = \frac{6}{27} = \frac{2}{9}$$

$$\div 2 \qquad \div 2 \qquad \div 3$$

That is as far as we can go. The fraction simplifies to $\frac{2}{9}$

Method 2

Divide both the top and bottom of the fraction by the Greatest Common Factor (you have to work it out first!).

Example: Simplify the fraction $\frac{8}{12}$:

The largest number that goes exactly into both 8 and 12 is 4, so *the Greatest Common Factor is 4.*

Divide both top and bottom by 4:

$$\div 4$$

$$\frac{8}{12} = \frac{2}{3}$$

$$\div 4$$

That is as far as we can go. The fraction simplifies to $\frac{2}{3}$

Mild

1. $\frac{4}{16}$ =

3. $\frac{6}{15}$ =

5. $\frac{9}{12}$ =

2. $\frac{14}{21}$ =

4. $\frac{18}{34}$ =

6. $\frac{36}{45}$ =

Spicy

1. $\frac{15}{33} = \frac{5}{11}$

2. $\frac{12}{15} = \frac{4}{5}$

3. $\frac{9}{36} = \frac{1}{4}$

4. $\frac{14}{20} = \frac{7}{10}$

5. $\frac{115}{230} = \frac{1}{2}$

6. $\frac{14}{49} = \frac{2}{7}$

Hot

11. $\frac{?}{45} = \frac{3}{5}$

12. $\frac{32}{48} = \frac{?}{3}$

13. $\frac{35}{80} = \frac{7}{?}$

14. $\frac{?}{42} = \frac{1}{3}$

15. $\frac{48}{?} = \frac{1}{2}$