

Simplifying Fractions .

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Revision :

$$\frac{2}{3} = \frac{6}{9} \quad \text{good}$$

$$\frac{6}{14} = \frac{3}{7} \quad \checkmark$$

Simplifying fractions :

$$\frac{18}{8} = \frac{9}{4} \quad \checkmark$$

$\div 2$

[If both numbers are even
→ keep on halving the numbers
 \div by 2

$$\frac{28}{16} = \frac{14}{8} = \left(\frac{7}{4}\right) \quad \checkmark$$

$$\frac{14}{8}$$

$$2 \times \frac{7}{8} = \frac{2}{8}$$

$$2 \times \frac{7}{8} = 14$$

$$\frac{48}{32} = \frac{24}{16} = \frac{12}{8} = \frac{6}{4} = \left(\frac{3}{2}\right) \quad \checkmark$$

$$\frac{24}{16}$$

$$\frac{12}{8}$$

$$3 - 2 = 1$$

$$\frac{16}{2} = 8$$

$$\frac{12}{2} = 6$$

$$\frac{9}{15} = \frac{3}{5} \quad \checkmark$$

[In case of odd numbers
we look for 3 to divide
(but it can be 5 or 7 as well)]

$$\frac{9}{6} = \frac{3}{2} \quad \text{(look for common divisor of numerator and denominator)}$$

$$\frac{5}{15} = \frac{1}{3} \quad \text{[Common divisor is 5]}$$

$$5 \div 3 = 1$$

$$3 \div 3 = 1$$

$$3 \times 1 = 3$$

$$3 \times 1 = 3$$

$$\frac{7}{14} = \frac{1}{2} \quad \text{(Common div is 7)}$$

$$\frac{8}{16} = \frac{1}{2}$$

$$\frac{8}{16} = \frac{1}{2}$$

$$\frac{8}{16} = \frac{4}{8} = \frac{2}{4} = \frac{1}{2}$$

Simplify the fractions.

1. $\frac{6}{30} = \frac{2}{10} = \frac{1}{5}$

2. $\frac{5}{10} = \frac{1}{2}$

3. $\frac{4}{40} = \frac{1}{10}$

4. $\frac{24}{30} = \frac{12}{15} = \frac{4}{5} \checkmark$

5. $\frac{6}{8} = \frac{3}{4}$

$$6. \frac{8}{12} = \frac{4}{6} = \frac{2}{3}$$

7. $\frac{12}{24} = \frac{2}{4} = \frac{1}{2}$

8. $\frac{99}{108} = \frac{11}{12}$ ✓

③ $\sqrt{108}$ ✓

$$\begin{array}{r} \overline{)99} \\ 108 \end{array}$$

that's that since
to be

11. $\frac{50}{80} = \frac{5}{8}$

12. $\frac{63}{72} = \frac{7}{8}$ ✓

13. $\frac{9}{72} = \frac{1}{8}$

14. $\frac{48}{96} = \frac{24}{48} = \frac{12}{24} = \frac{6}{12} = \frac{1}{2}$

16. $\frac{49}{70} = \frac{7}{10}$ ✓

15. $\frac{2}{6} = \frac{1}{3}$

16. $\frac{49}{70} = \frac{7}{10}$ ✓

$$\frac{15}{30} = \frac{5}{10} = \frac{1}{2}$$

$$\rightarrow \frac{30}{15} = \frac{10}{5} = \frac{2}{1} = 2 \checkmark$$

$4+9 = 13$ \nwarrow not divisible by 3

$\Rightarrow 49$ is also not divisible by 3.

