

Division of Fractions

Divide the following fractions:

1. $\frac{5}{3} \div \frac{7}{3}$

2. $\frac{10}{17} \div \frac{5}{17}$

3. $\frac{3}{4} \div \frac{1}{4}$

4. $\frac{9}{10} \div \frac{3}{10}$

5. $\frac{13}{18} \div \frac{11}{18}$

The cool thing about the above fractions is that since each pair has a common denominator, then the denominators cancel completely out! Just like we can multiply across the tops of fractions in multiplication, we can do the same thing for division! Check it out:

$$\frac{5}{4} \div \frac{3}{4} = \frac{5 \div 3}{4 \div 4} = \frac{\frac{5}{3}}{1} = \frac{5}{3} \quad \leftarrow \text{Cool stuff!}$$

Divide the following fractions and whole numbers:


6. $\frac{4}{5} \div 2$


7. $\frac{12}{17} \div 4$

8. $\frac{9}{8} \div 3$

9. $\frac{16}{25} \div 4$

10. $\frac{63}{100} \div 21$

The idea behind these is as follows: $\frac{8}{5} \div 2$ means to take $\frac{8}{5} \rightarrow$  and split them into 2 groups.

There will be $\frac{4}{5}$ in each group! \rightarrow 

Divide the following fractions. Simplify to lowest terms, if possible!

11. $\frac{15}{16} \div \frac{12}{5}$


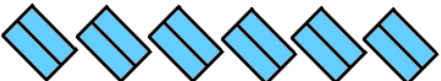
12. $\frac{5}{6} \div \frac{5}{8}$

13. $\frac{3}{7} \div \frac{7}{8}$

14. $\frac{2}{3} \div \frac{1}{2}$

15. $\frac{15}{18} \div \frac{10}{30}$

The following problems involve breaking up a whole number into parts. For example, $4 \div \frac{2}{3}$ means take 4

wholes \rightarrow  and put them into groups of $\frac{2}{3}$. 

How many groups does this make? Six!

Divide the following!

16. $12 \div \frac{3}{4}$

17. $24 \div \frac{3}{8}$

18. $9 \div \frac{3}{7}$

19. $10 \div \frac{2}{5}$

20. $30 \div \frac{6}{7}$

Answers: 1. $\frac{5}{7}$ 2. 2 3. 3 4. 3 5. $\frac{3}{11}$ 6. $\frac{2}{5}$ 7. $\frac{3}{17}$ 8. $\frac{3}{8}$ 9. $\frac{4}{25}$ 10. $\frac{3}{100}$ 11. $\frac{25}{64}$ 12. $\frac{4}{3}$

13. $\frac{24}{49}$ 14. $\frac{4}{3}$ 15. $\frac{5}{2}$ 16. 16 17. 64 18. 21 19. 25 20. 35