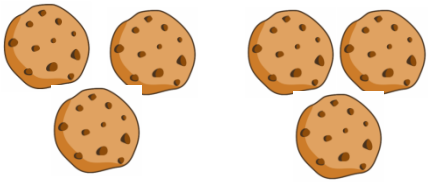
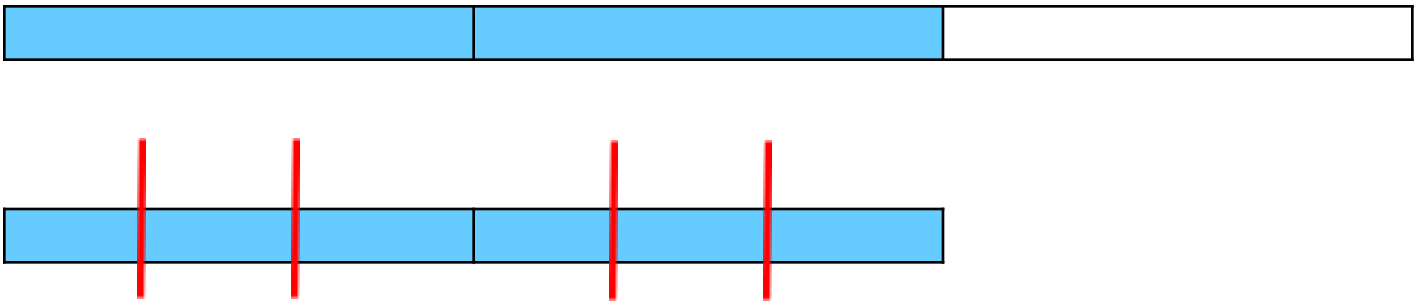
5.9 Dividing Fractions



$6 \div 3 = 2$

We can think of this as: how many groups of 3 can we make from 6?

$\frac{2}{3} \div \frac{1}{3}$ How many groups of $\frac{1}{3}$ are there in $\frac{2}{3}$?



Therefore, $\frac{2}{3} \div \frac{1}{3} =$

Again, it is time consuming to draw pictures. And sometimes, the pictures get too complicated to draw. Here is the shortcut.

$\frac{2}{3} \div \frac{1}{3} =$

$\frac{1}{2} \div \frac{1}{4} =$

Dividing Fractions:

1. Flip & Multiply
2. Reduce
3. Multiply the numerators together and multiply the denominators together.

Does your answer make sense?

How many $\frac{1}{4}$ hour episodes can you watch in $\frac{1}{2}$ hour?

1. $\frac{3}{4} \div \frac{1}{18}$

2. $13 \div \frac{3}{4}$

5.9 Dividing Fractions Assignment

Dividing Fractions (A)

Find the value of each expression in lowest terms.

1. $20 \div \frac{5}{3}$

2. $\frac{8}{5} \div \frac{3}{2}$

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

4. $\frac{11}{6} \div \frac{11}{3}$

5. $\frac{7}{2} \div \frac{4}{5}$

6. $\frac{13}{3} \div \frac{15}{7}$

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

8. $16 \div \frac{13}{4}$

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

10. $\frac{11}{2} \div \frac{3}{4}$

11. $\frac{19}{10} \div \frac{1}{5}$

12. $\frac{12}{5} \div \frac{1}{8}$

Dividing Fractions (B)

Find the value of each expression in lowest terms.

1. $\frac{1}{2} \div \frac{7}{4}$

2. $\frac{1}{3} \div \frac{18}{7}$

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

4. $\frac{7}{3} \div 6$

5. $3 \div \frac{2}{5}$

6. $3 \div \frac{17}{8}$

7. $2 \div \frac{1}{2}$

8. $\frac{3}{10} \div 15$

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

10. $\frac{3}{2} \div \frac{7}{2}$

11. $2 \div \frac{2}{5}$

12. $\frac{5}{7} \div \frac{4}{3}$

13. Bob has a 10 foot board. How many ½ foot pieces can he cut?

14. Tanya 5 inches of ribbon to decorate a banner.
How many 2/3 inch pieces can she cut?