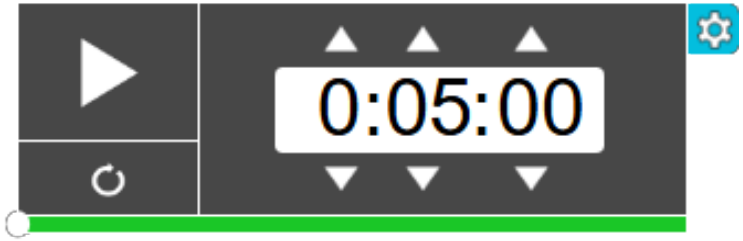
Warm up



Convert:

40% to a decimal

8:20 to a fraction

15/30 to a percent

What Does Simplify Mean?

Simplifying means:

- Writing a ratio or fraction in the smallest possible form
- We must simplify all our answers
  - Sometimes they are already simplified!

Example:

$\frac{10}{20} = \frac{1}{2}$ ✓ (÷10, ÷10)

$\frac{6}{18} = \frac{1}{3}$ (÷6, ÷6)

10
1 x 10
2 x 5

20
1 x 20
2 x 10
4 x 5

GCF = 10

6
1 x 6
2 x 3

GCF = 6

18
1 x 18
2 x 9
3 x 6

Your Turn

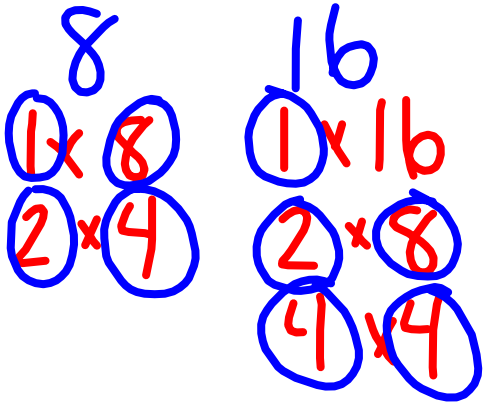
Simplify:

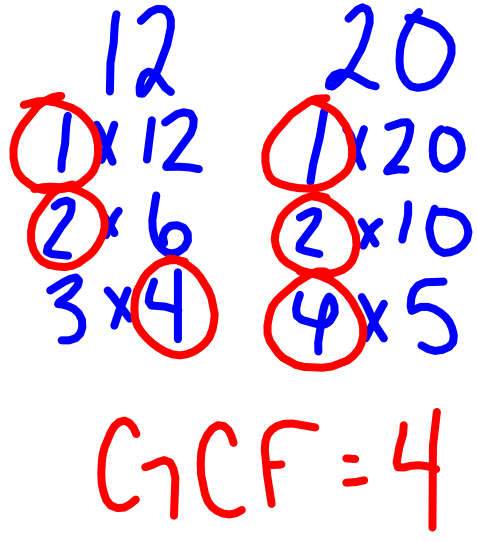
$\frac{8}{16} \div 8 = \frac{1}{2}$

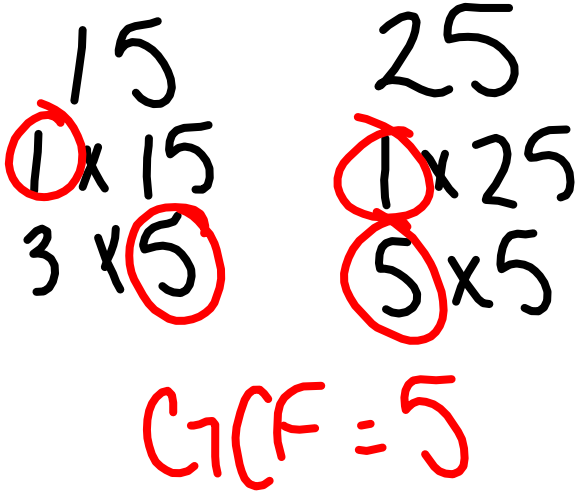
$\frac{12}{20} \div 4 = \frac{3}{5}$

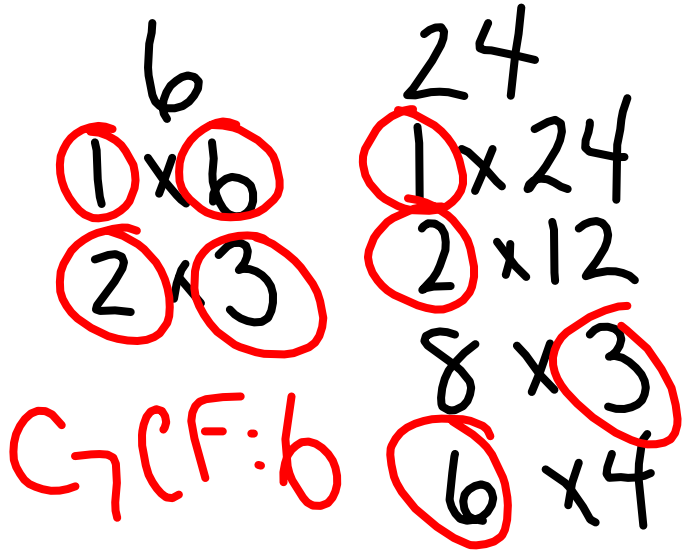
$\frac{25}{6} \div 5 = \frac{3}{5}$

$\frac{24}{6} \div 6 = \frac{1}{4}$









Simplifying Ratios is the same as simplifying fractions

Example:

$8:20$ ÷4 ÷4

$2:5$

8
1 x 8
2 x 4

20
1 x 20
2 x 10
4 x 5

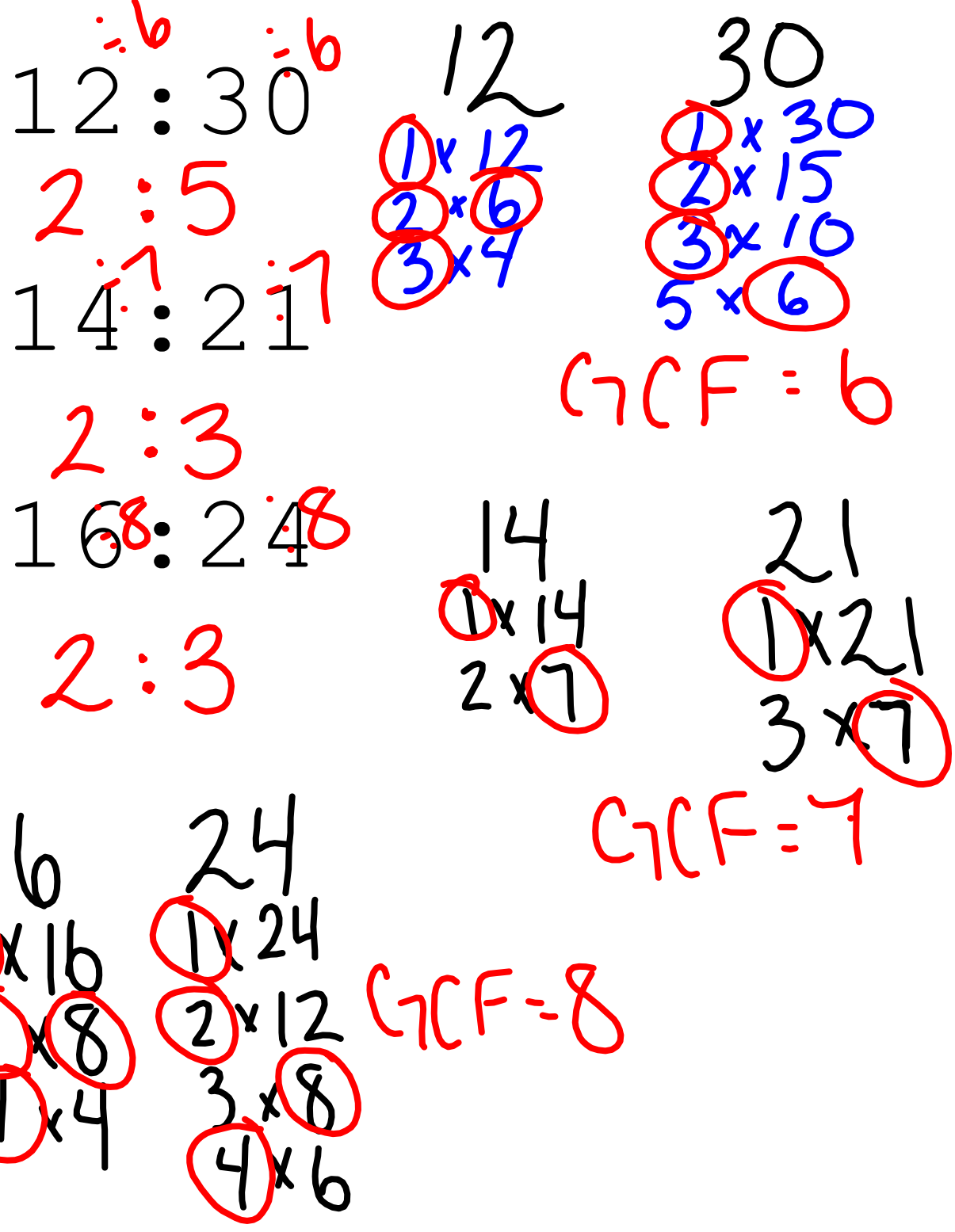
GCF = 4

Simplify:

$\frac{20}{40}$

$\frac{18}{24}$

$\frac{25}{50}$



A school collected **18 boxes of cereal** and **12 jars of peanut butter** for the food bank.

a) What fraction of all the donated items were jars of peanut butter?

b) Simplify the fraction.

c) Write the simplified fraction as a decimal.

d) Write the decimal as a percent.

$\frac{12}{30} \div 6 \div 6 = \frac{2}{5}$

$\frac{2}{6}$

12
1 x 12
2 x 6
3 x 4

30
1 x 30
2 x 15
3 x 10
5 x 6

GCF = 6

c) $\frac{2}{5} \times 2 = \frac{4}{10} = 0.4$

d) 40 %

Practice Question 1

A class has **16 students who play hockey** and **8 students who play basketball**.

a) What fraction of the students play basketball?

b) Simplify the fraction.

c) Write the simplified fraction as a decimal.

d) Write the decimal as a percent.

Practice Question 2

A bag contains **15 blue marbles** and **10 red marbles**.

a) What fraction of the marbles are red?

b) Simplify the fraction.

c) Write the simplified fraction as a decimal.

d) Write the decimal as a percent.

Homework