

Warm-Up

Sept 29

Using the numbers below and math operation, try to reach the given target!

Numbers: 3, 7, 2, 8, 5

Target: 24

RULES

- You can only use each number once.
- You can use any of the four operations (+, -, ×, ÷).
- They must get exactly 24.

$$8 \times 3 - 7 + 5 + 2$$

$$24 - 7 + 5 + 2$$

$$17 + 5 + 2$$

$$(24)$$

FRACTIONS

- **Fraction:** A number that represents a part of a whole, written in the form a/b where a is the numerator and b is the denominator.
- **Mixed Number:** A whole number combined with a fraction
> e.g., ~~$3\frac{1}{2}$~~ ~~$2\frac{1}{2}$~~ ex. $3\frac{1}{2}$
- **Improper Fraction:** A fraction where the numerator is greater than or equal to the denominator, e.g., $\frac{7}{4}$ 4.
- **Simplifying:** Reducing a fraction to its simplest form.
- **Greatest Common Factor (GCF):** The largest number that divides both the numerator and the denominator.

Simplifying Proper Fractions

1. Steps to Simplify a Fraction:

- > Find the greatest common factor of the numerator and denominator.
- > Divide both the numerator and denominator by the greatest common factor.

Simplify $\frac{12 \div 4}{16 \div 4} = \frac{3}{4}$ ✓

Greatest common factor =

12	16
6 x 2	1 x 16
1 x 12	8 x 2
4 x 3	4 x 4

Practice

Simplify the following fractions:

$$1) \frac{18}{24} \overset{\div 6}{=} \frac{3}{4}$$

$$2) \frac{8}{12} \overset{\div 4}{=} \frac{2}{3}$$

$$3) \frac{15}{20} \overset{\div 5}{=} \frac{3}{4}$$

GCF

$$\begin{array}{l} 18 \\ 3 \times 6 \\ 2 \times 9 \\ 1 \times 18 \end{array}$$

$$\begin{array}{l} 8 \\ 1 \times 8 \\ 2 \times 4 \end{array}$$

$$\begin{array}{l} 15 \\ 1 \times 15 \\ 3 \times 5 \end{array}$$

$$\begin{array}{l} 24 \\ 1 \times 24 \\ 6 \times 4 \\ 2 \times 12 \\ 8 \times 3 \end{array}$$

$$\begin{array}{l} 12 \\ 1 \times 12 \\ 2 \times 6 \\ 3 \times 4 \end{array}$$

$$\begin{array}{l} 20 \\ 1 \times 20 \\ 2 \times 10 \\ 4 \times 5 \end{array}$$

Simplify

a) $\div 50$

$$\frac{50}{100} \div 50 = \frac{1}{2}$$

b) $\div 4$

$$\frac{4}{36} \div 4 = \frac{1}{9}$$

c) $\div 4$

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

50	100
1×50	1×100
2×25	2×50
5×10	4×25
	5×20
	10×10

4	36
1×4	1×36
2×2	6×6
	2×18
	4×9

12	20
1×12	1×20
2×6	2×10
3×4	4×5

<https://youtu.be/2zuRQmwaREY?si=ERR6HMRDF6NSCidL>

Homework