



Comparing and Ordering Fractions

FREE Worksheet - 4

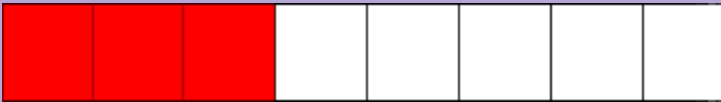
Time: 20 minutes

(Detailed solutions at the end)

1. Which is greater: $\frac{4}{6}$ or $\frac{7}{9}$?

Answer: _____

2. Study the following figure. Is the shaded fraction greater than $\frac{1}{2}$?



Answer: _____

3. Mrs. Roberts had 2 ribbons of the same length.
She cuts $\frac{2}{3}$ of one of the ribbons for Ahmed and
 $\frac{2}{6}$ of the other ribbon for Davis.

Who got the smaller piece?

Answer: _____



4. Arrange the following fractions in order, beginning with the smallest.

$$\frac{5}{6}, \frac{3}{4}, \frac{2}{3}$$

Answer: _____

5. Alvin, Sophie and Cynthia each had a similar pizza.

Alvin ate $\frac{5}{6}$ of his pizza.

Sophie ate $\frac{2}{4}$ of her pizza.

Cynthia ate $\frac{2}{3}$ of her pizza.

Is the following statement true or false?

Sophie ate a smaller portion than Cynthia.

Answer: _____

6. Fill in the blank: (greater than, less than or equal to)

$$\frac{1}{6} \text{ is } \underline{\hspace{2cm}} \frac{1}{8}$$



7. Which is smaller: $\frac{3}{5}$ or $\frac{1}{5}$?

Answer: _____

8. Fill in the blank: (greater than, less than or equal to)

$\frac{2}{6}$ is _____ $\frac{2}{9}$



SOLUTIONS

Problem 1

To compare the two fractions, we must first express the fractions using a common denominator.

Fraction 1:

$$\frac{4}{6} = \frac{8}{12} = \frac{12}{18}$$

Fraction 2:

$$\frac{7}{9} = \frac{14}{18}$$

_____ $\frac{14}{18}$ is greater than $\frac{12}{18}$

So, $\frac{7}{9}$ is **greater than** $\frac{4}{6}$

Problem 2

The shaded portion of the figure represents the fraction $\frac{3}{8}$

To compare the fractions, we must first list the equivalent fractions of $\frac{1}{2}$

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



$$\frac{3}{8} \text{ is } \textit{less than} \frac{4}{8}$$

So, the statement is **False**.

Problem 3

To compare the two fractions, we must first express the fractions using a common denominator.

$$\text{Ahmed: } \frac{2}{3} = \frac{4}{6}$$

$$\text{Davis: } \frac{2}{6}$$

_____ $\frac{2}{6}$ is less than $\frac{4}{6}$

So, Davis got the smaller piece.

Problem 4

To compare the two fractions, we must first express them using a common denominator.

$$\text{Fraction 1: } \frac{5}{6} = \frac{10}{12}$$

$$\text{Fraction 2: } \frac{3}{4} = \frac{9}{12}$$

$$\text{Fraction 3: } \frac{2}{3} = \frac{8}{12}$$



The fraction with the smallest numerator is the smallest fraction while the fraction with the biggest numerator is the biggest fraction.

So, beginning with the smallest, the fractions should be arranged in the following order:

$$\frac{2}{3}, \frac{3}{4}, \frac{5}{6}$$

Problem 5

To compare the fractions, we must first express the fractions with the same denominator by making a list of equivalent fractions.

$$\text{Sophie: } \frac{2}{4} = \frac{4}{8} = \frac{6}{12}$$

$$\text{Cynthia: } \frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \frac{8}{12}$$

$$\frac{6}{12} \text{ is greater than } \frac{8}{12}$$

So, the statement, Sophie ate a smaller portion than Cynthia, is ***True.***

Problem 6

To compare the two fractions, we must first express the fractions using a common denominator.



$$\text{Fraction 1: } \frac{1}{6} = \frac{2}{12} = \frac{3}{18} = \frac{4}{24}$$

$$\text{Fraction 2: } \frac{6}{8} = \frac{12}{16} = \frac{18}{24}$$

$$\frac{4}{24} \text{ is less than } \frac{18}{24}.$$

$$\text{So, } \frac{1}{6} \text{ is less than } \frac{6}{8}.$$

Problem 7

The fractions $\frac{3}{5}$ and $\frac{1}{5}$ have a common denominator.

The smaller fraction is the one with the smaller numerator.

So, $\frac{1}{5}$ is the smaller fraction.

Problem 8

To compare the two fractions, we must first express both the fractions with the same denominator by making a list of equivalent fractions.



$$\text{Fraction 1: } \frac{2}{6} = \frac{4}{12} = \frac{6}{18}$$

$$\text{Fraction 2: } \frac{2}{9} = \frac{4}{18}$$

$$\frac{6}{18} \text{ is greater than } \frac{4}{18} .$$

$$\text{So, } \frac{2}{6} \text{ is greater than } \frac{2}{9} .$$