

Objective: TSWBAT make equivalent fractions and write fractions in simplest form

Vocabulary

- ① equivalent fractions - fractions that name the same amount
- ② simplest form - a fraction is in simplest form when the only common factor of the numerator and denominator is one.

Equivalent Fractions



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

$$\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$$

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

1 EXAMPLE Equivalent Fractions

Write three fractions equivalent to $\frac{6}{8}$.

$$\frac{6}{8} = \frac{12}{16} \quad \leftarrow \text{Multiply the numerator and denominator by 2.}$$

$$\frac{6}{8} = \frac{18}{24} \quad \leftarrow \text{Multiply the numerator and denominator by 3.}$$

$$\frac{6}{8} = \frac{3}{4} \quad \leftarrow \text{Divide the numerator and denominator by 2.}$$

$$\text{So, } \frac{3}{4} = \frac{6}{8} = \frac{12}{16} = \frac{18}{24}.$$

Simplest Form of a Fraction

* Reduce a fraction by using the GCF or any common factor.

$$\frac{10}{20}$$

$$\frac{16}{24}$$

$$\frac{27}{36}$$

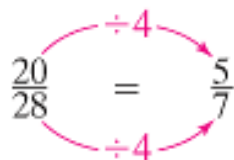
$$\frac{45}{50}$$

2**EXAMPLE****Fractions in Simplest Form**

Write $\frac{20}{28}$ in simplest form.

20: 1, 2, 4, 5, 10, 20 ← List the factors for the numerator and denominator.

28: 1, 2, 4, 7, 14, 28 ← Find the greatest common factor.

$$\frac{20}{28} = \frac{5}{7}$$


← Divide the numerator and denominator by the GCF.

The fraction $\frac{20}{28}$ written in simplest form is $\frac{5}{7}$.

Write two fractions equivalent to each fraction.

1. $\frac{5}{6}$ _____ 2. $\frac{3}{7}$ _____ 3. $\frac{7}{8}$ _____

4. $\frac{3}{11}$ _____ 5. $\frac{3}{6}$ _____ 6. $\frac{1}{5}$ _____

State whether each fraction is in simplest form. If it is not, write it in simplest form.

7. $\frac{12}{15}$ _____ 8. $\frac{8}{15}$ _____ 9. $\frac{9}{21}$ _____

10. $\frac{15}{22}$ _____ 11. $\frac{14}{30}$ _____ 12. $\frac{25}{70}$ _____

Write each fraction in simplest form.

13. $\frac{12}{24}$ _____ 14. $\frac{10}{200}$ _____ 15. $\frac{56}{64}$ _____

16. $\frac{3}{9}$ _____ 17. $\frac{130}{170}$ _____ 18. $\frac{12}{16}$ _____

19. $\frac{7}{49}$ _____ 20. $\frac{22}{33}$ _____ 21. $\frac{30}{225}$ _____

Homework: p 136, 1-36