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## Equivalent Fractions

N.1.B N.1.C

## Example

Which shows a fraction that is equivalent to  $\frac{3}{4}$ ?



## Example

What is  $\frac{10}{12}$  written in simplest form?

- A.  $\frac{2}{3}$                       B.  $\frac{3}{4}$   
C.  $\frac{4}{5}$                       D.  $\frac{5}{6}$

## Thinking It Through

**Solve** You can write an equivalent fraction by multiplying or dividing the numerator and denominator of a fraction by the *same* number.

Since  $\frac{3}{4}$  is in simplest form, multiply:

$$\frac{3}{4} \times \frac{2}{2} = \frac{6}{8}$$

$$\frac{3}{4} \times \frac{3}{3} = \frac{9}{12}$$

So  $\frac{6}{8}$  and  $\frac{9}{12}$  are equivalent to  $\frac{3}{4}$ .

The rectangle in answer choice B shows  $\frac{6}{8}$ , so the correct answer is B.

## Thinking It Through

**Solve** To write a fraction in simplest form, divide the numerator and denominator by their greatest common factor:

Find the factors of 10: 1, 2, 5, 10

Find the factors of 12: 1, 2, 3, 4, 6, 12

2 is the GCF:  $\frac{10}{12} \div \frac{2}{2} = \frac{5}{6}$ , answer D.

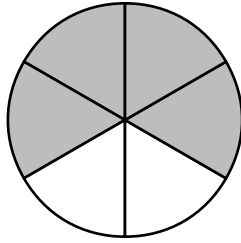
## Review

- To find **equivalent fractions**, multiply or divide the **numerator** and **denominator** of a fraction by the *same* number. For example,  $\frac{1}{2} = \frac{3}{6}$  because  $\frac{1}{2} \times \frac{3}{3} = \frac{3}{6}$  and  $\frac{4}{8} = \frac{1}{2}$  because  $\frac{4}{8} \div \frac{4}{4} = \frac{1}{2}$ .
- A **fraction** is in **simplest form** when the only common factor of the numerator and denominator is 1. Divide a fraction by the **greatest common factor (GCF)** of its numerator and denominator to write it in simplest form.

# Equivalent Fractions

Directions: Carefully read each question. Fill in the circle next to the correct answer.

1. Which fraction is equivalent to the fraction shown below?

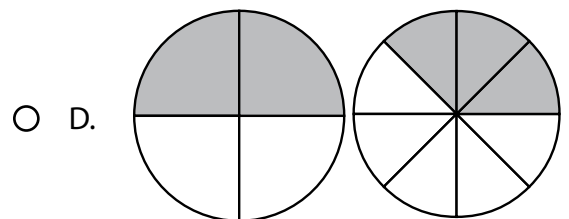
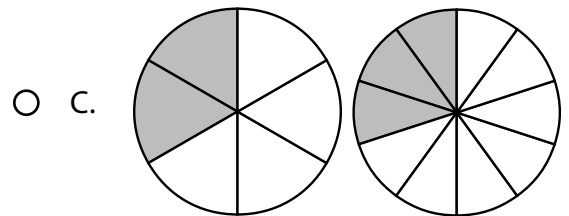
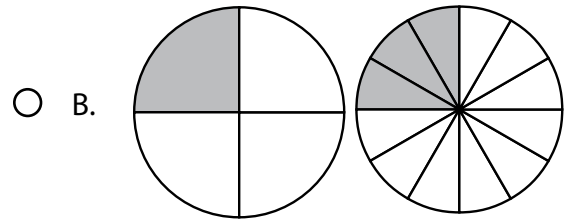
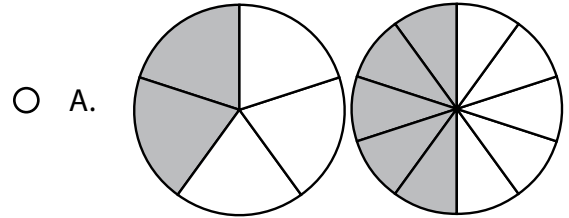


- A.  $\frac{2}{3}$   
 B.  $\frac{3}{5}$   
 C.  $\frac{6}{8}$   
 D.  $\frac{9}{12}$
2. What is  $\frac{8}{10}$  written in simplest form?
- A.  $\frac{2}{3}$   
 B.  $\frac{3}{4}$   
 C.  $\frac{4}{5}$   
 D.  $\frac{5}{6}$



To find a fraction in simplest form, divide the numerator and denominator by their GCF.

3. Which shows equivalent fractions?



4. Which fraction has a different value than the others?

- A.  $\frac{2}{3}$                        B.  $\frac{4}{6}$   
 C.  $\frac{6}{9}$                          D.  $\frac{9}{12}$