Exploration 2

GOAL

LEARN HOW TO...
- find equivalent fractions
- write a fraction in lowest terms

AS YOU...
- use pattern blocks to make window designs

KEY TERMS
- lowest terms

SET-UP: You will need: • pattern blocks • fraction calculator (optional)

> Equivalent fractions can be used to describe the window designs shown below.

Original window design made with 6 trapezoids (△).

New window design is made by replacing 4 trapezoids (△) with triangles (▲).

9. a. Use trapezoids (△) to create the original window. What fraction of the original window will be replaced with triangles (▲) to create the new window? \( \frac{4}{6} \)

b. Without looking at the picture of the new window, how can you determine the number of triangles you will need to replace the 4 outside trapezoids? \( 4 \cdot 3 = 12 \) triangles

c. If you were going to replace all of the trapezoids with triangles, how many triangles would you need? \( 6 \cdot 3 = 18 \) triangles

d. What fraction of the new window is covered with triangles? \( \frac{12}{18} \)