

Figure 1

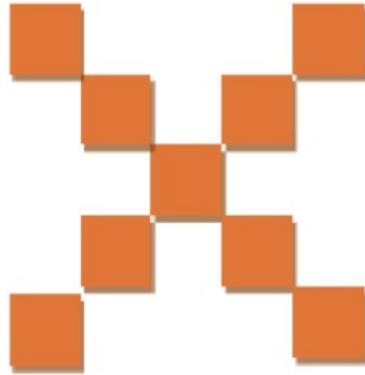


Figure 2

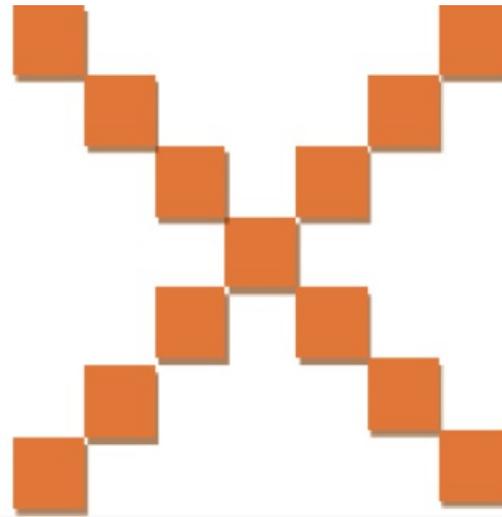


Figure 3

Sketch figures 4 and 5.

How many squares are in each one? Make a table.

Draw a sketch of figure 43.

Student Facing Task Statement: Meters and Centimeters

There are 100 centimeters (cm) in every meter (m).

length (m)	length (cm)
1	100
0.94	
1.67	
57.24	
x	

length (cm)	length (m)
100	1
250	
78.2	
123.9	
y	

1. Complete each of the tables.
2. For each table, find the constant of proportionality.
3. What is the relationship between these constants of proportionality?
4. For each table, write an equation for the proportional relationship. Let x represent a length measured in meters and y represent the same length measured in centimeters.

I have a recipe that calls for 4 cups of sugar and 12 cups of flour.

Write the equations relating flour to sugar and sugar to flour.

What are the constants of proportionality?

A deer in the forest trotted 10 miles in 2 hours.

Write the equations relating miles to hours and hours to miles.

What are the constants of proportionality?

Student Facing Task Statement: Flight of the Albatross

An albatross is a large bird that can fly 400 kilometers in 8 hours at a constant speed. Using d for distance in kilometers and t for number of hours, an equation that represents this situation is $d = 50t$.

1. What are two constants of proportionality for the relationship between distance in kilometers and number of hours? What is the relationship between these two values?
2. Write another equation that relates d and t in this context.
3. What does 50 represent in the original equation?