

# **SQUARES ON A GRID**

## **LEARNING GOAL**

1. I can correct any mistakes I have been making when working with numbers in scientific notation.
2. I can reason about squares and their side lengths using a unit grid.

# WHAT I NEED IN MATH CLASS

**Directions:** Check the boxes that match your preferences about your upcoming work in math class.

I would like ...

- ☐ ... to learn new math
- ☐ ... to practice math skills using an online learning platform (Check all that apply)
  - ☐ ALEKS
  - ☐ wootmath!
  - ☐ Other: \_\_\_\_\_
- ☐ ... to be challenged.
- ☐ ... to do something creative (Select all that apply)
  - ☐ ... like a project
  - ☐ ... a presentation
  - ☐ ... making and sharing videos about math
  - ☐ Other: \_\_\_\_\_
- ☐ ... to interact more with my classmates or teacher.  
List any classmates below who you would like to collaborate with in math class.

# COMPLETE IF YOU HAVE NO WORK TO CORRECT

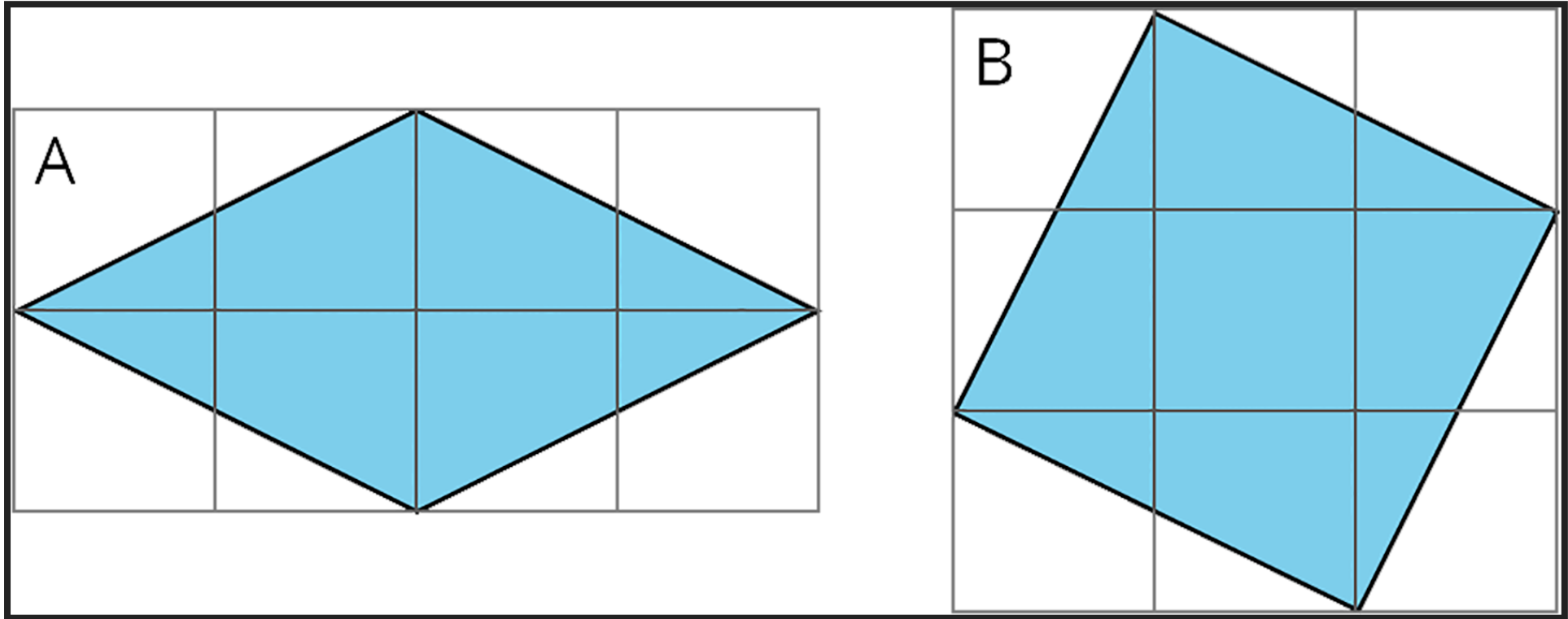
**Directions:** *If you do not have any work to correct*, answer the following question (or you may complete 2 topics on ALEKS). Make sure that you show your work and/or explain your thinking.

Which is larger: the number of meters across the Milky Way, or the number of cells in all humans? Explain or show your reasoning.

Some useful information:

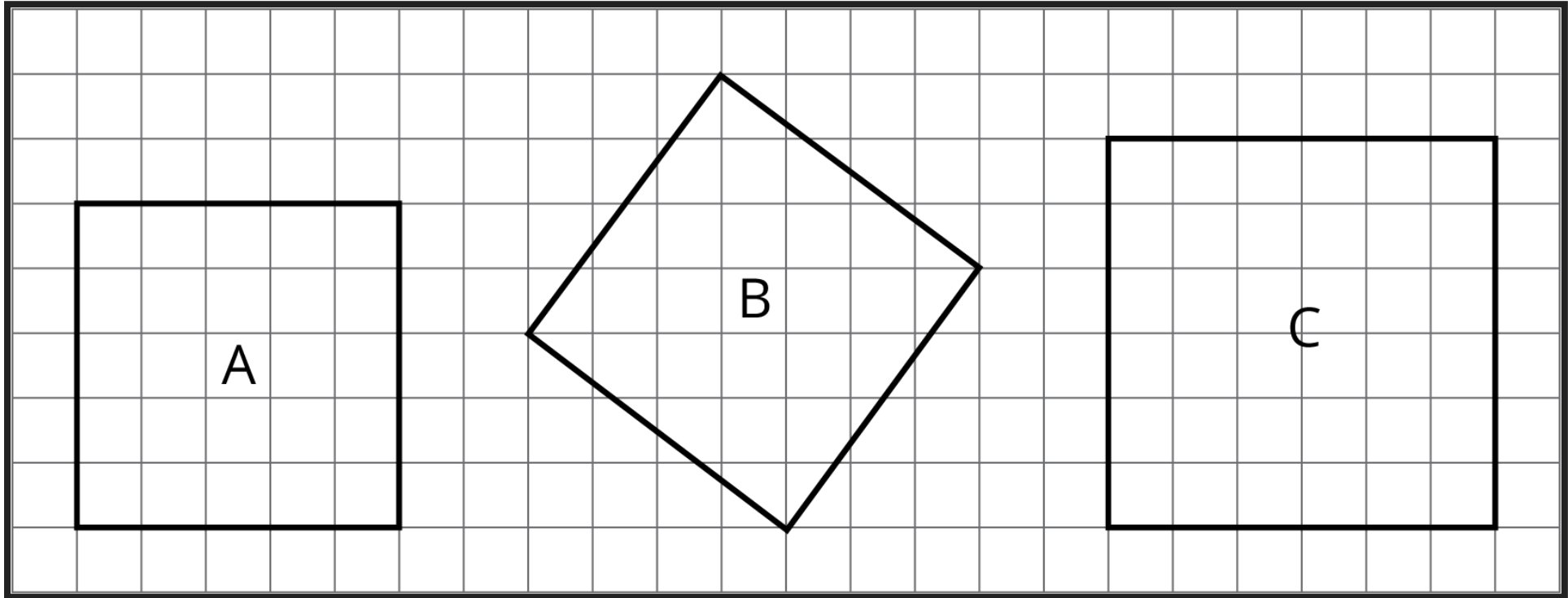
- The Milky Way is about 100,000 light years across.
- There are about 37 trillion cells in a human body.
- One light year is about meters.
- The world population is about 7 billion.

# TASK 1



Which shaded region is larger? Explain your reasoning.

## TASK 2

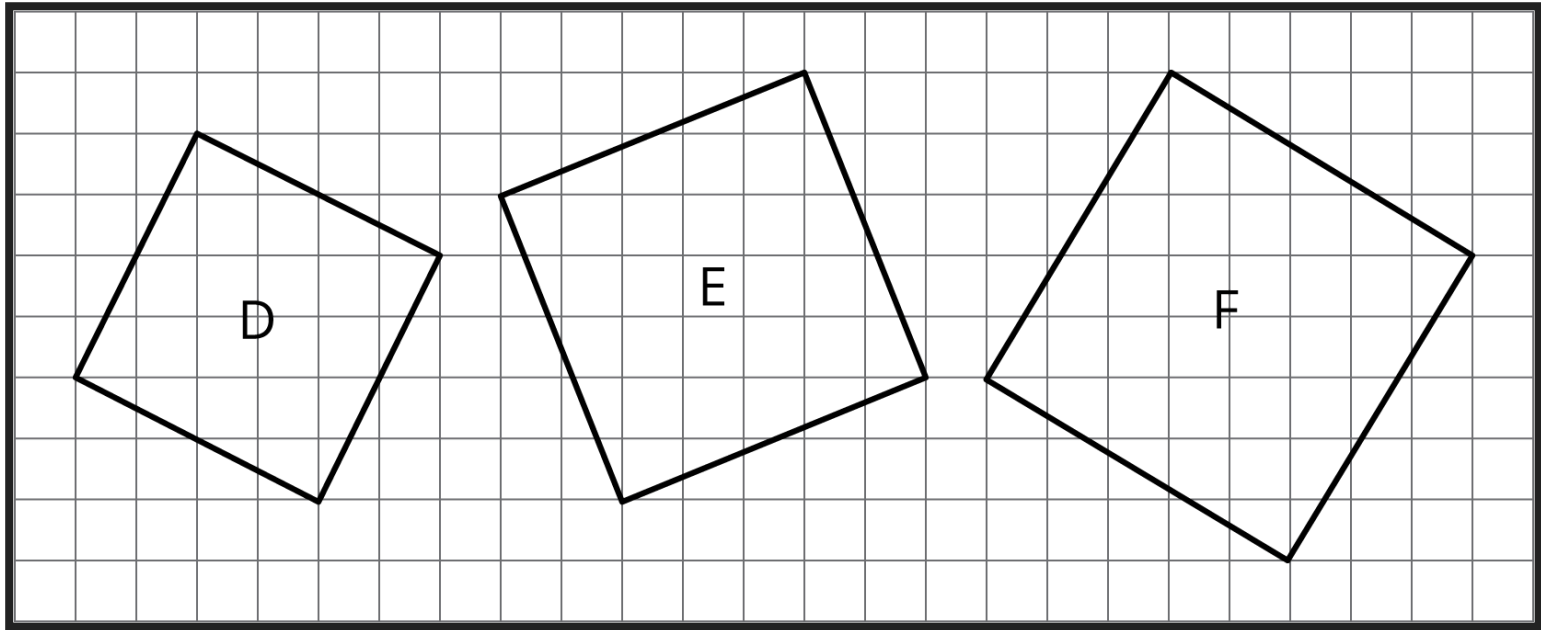


1. What is the side length of square A? What is its area?

3. What is the area of square B? What is its side length?

2. What is the side length of square C? What is its area?

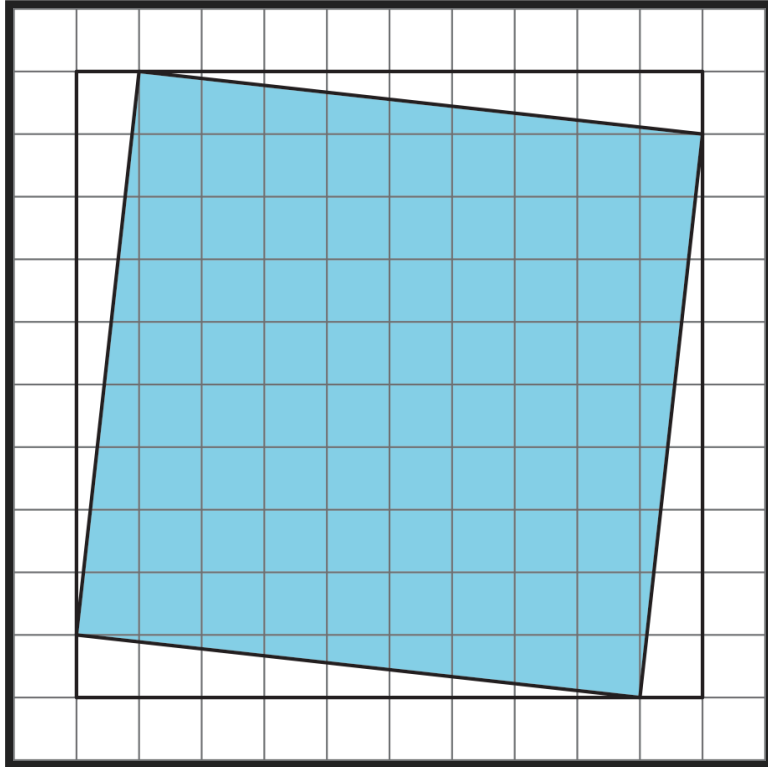
## TASK 3



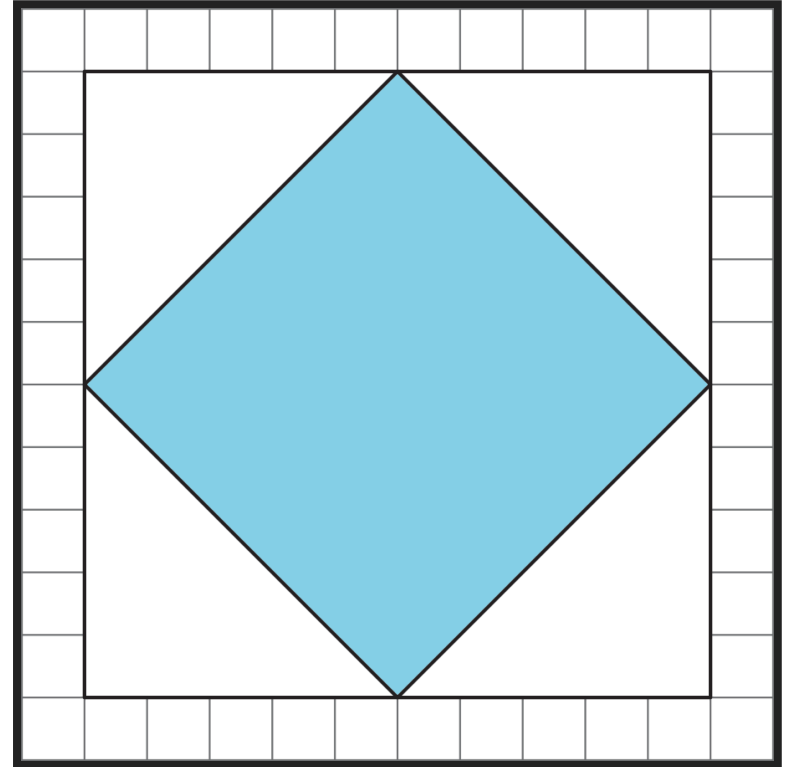
1. Find the areas of squares D, E, and F. Which of these squares must have a side length that is greater than 5 but less than 6? Explain how you know.

# TASK 4

Find the area of each shaded region (in square units). Show your thinking.

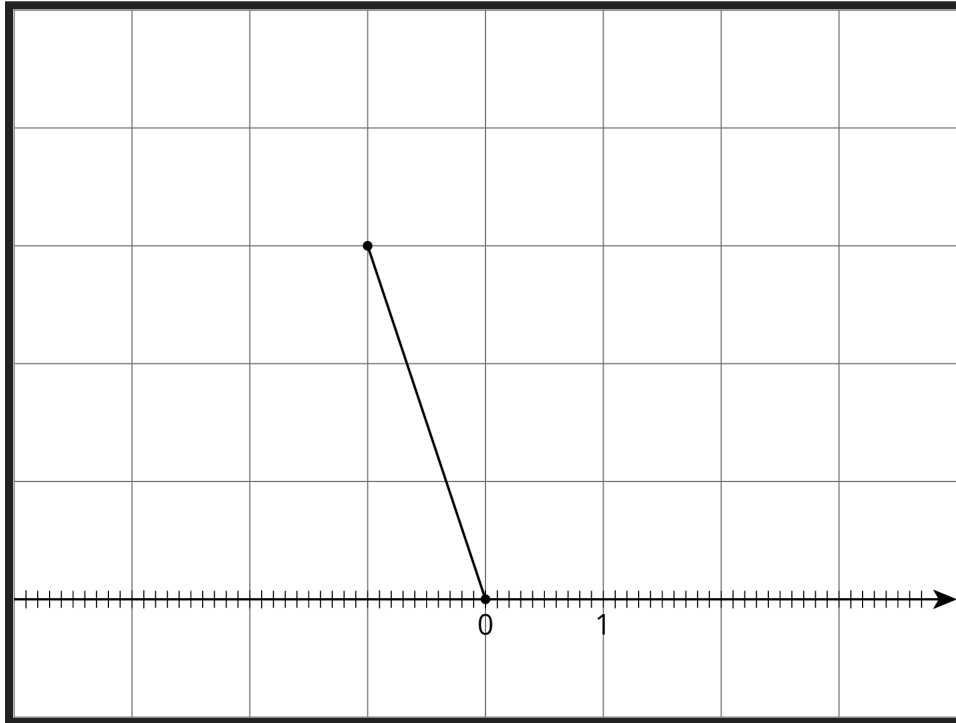


1.



2.

## TASK 5



1. Estimate the length of the line segment to the nearest tenth of a unit (each grid square is 1 square unit).