Unit 2 Lesson 4: Dilations on a Square Grid

1 Estimating a Scale Factor (Warm up)

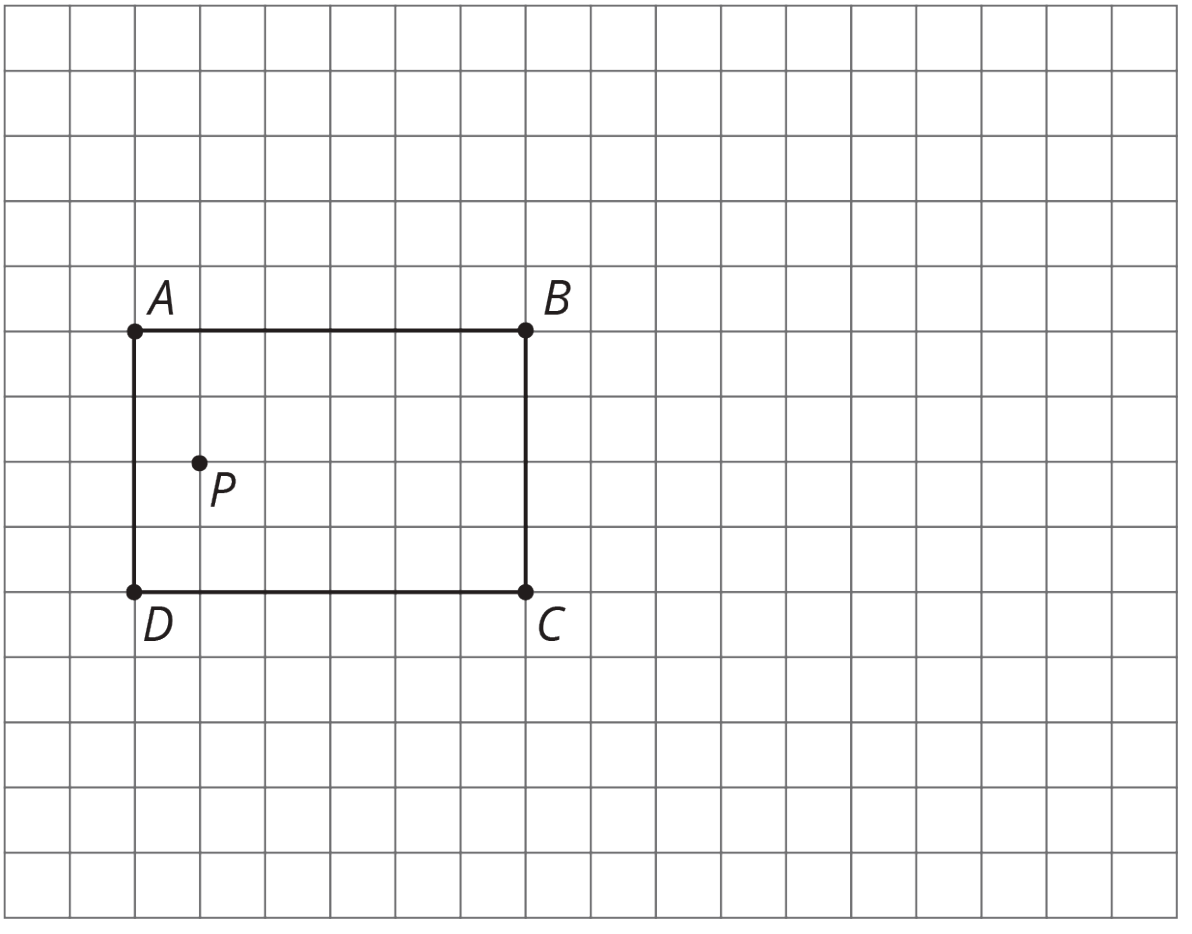
Student Task Statement

Point C is the dilation of point B with center of dilation A and scale factor s. Estimate s. Be prepared to explain your reasoning.

2 Dilations on a Grid

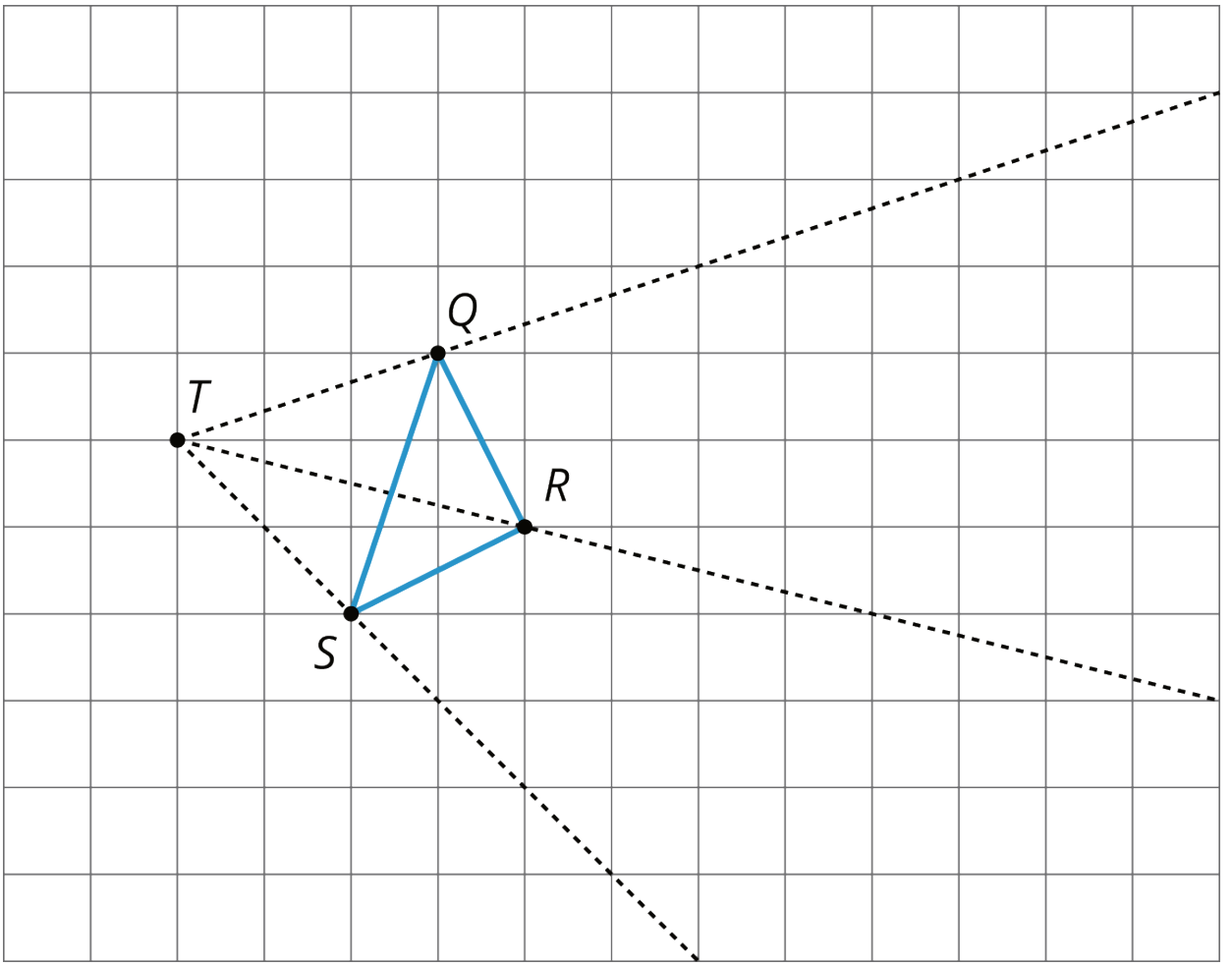
Student Task Statement

1. Find the dilation of quadrilateral $ABCD$ with center P and scale factor 2.



2. Find the dilation of triangle QRS with center T and scale factor 2.

3. Find the dilation of triangle QRS with center T and scale factor $\frac{1}{2}$.


Q
T
R
S

3 Card Sort: Matching Dilations on a Coordinate Grid

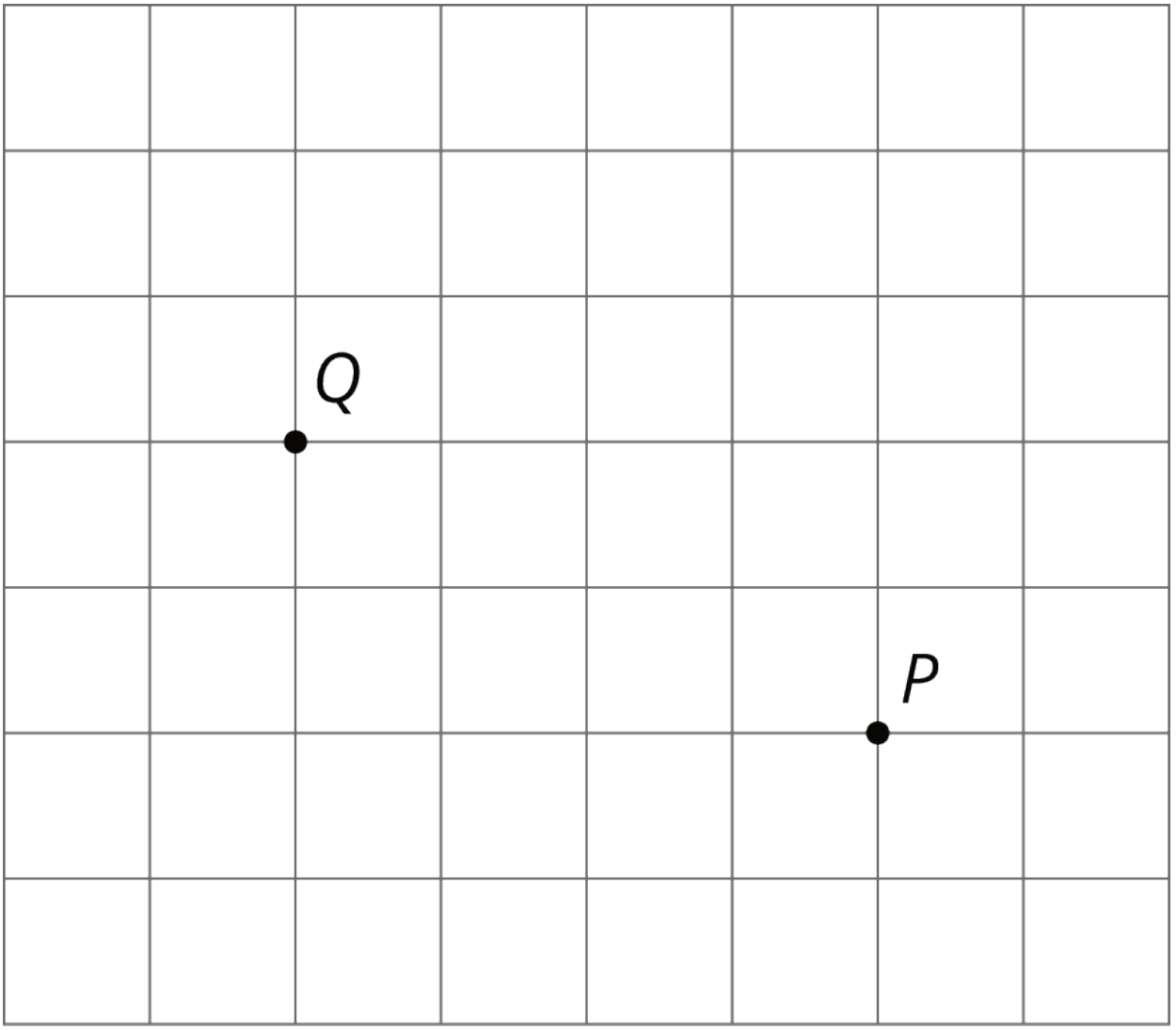
Student Task Statement

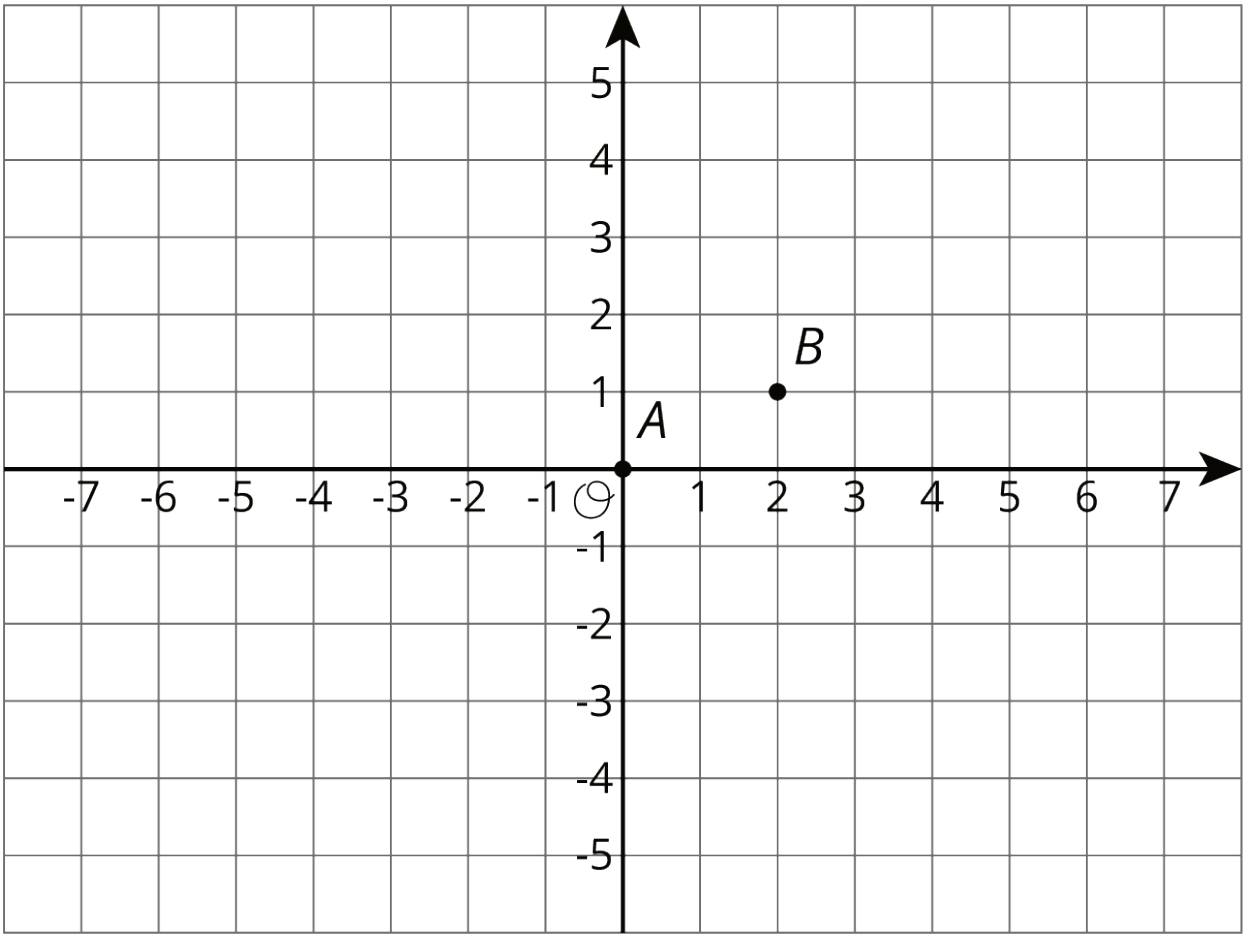
Your teacher will give you some cards. Each of Cards 1 through 6 shows a figure in the coordinate plane and describes a dilation.

Each of Cards A through E describes the image of the dilation for one of the numbered cards.

Match number cards with letter cards. One of the number cards will not have a match. For this card, you'll need to draw an image.

Images for Activity Synthesis




5
4
3
2
1
-1
-2
-3
-4
-5
-7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7
O
A
B