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



### 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







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