## Unit 1 Lesson 7: Construction Techniques 5: Squares

### 1 Which One Doesn’t Belong: Polygons (Warm up)

#### Student Task Statement

Which one doesn’t belong?

A



B



C



D



### 2 It’s Cool to Be Square

#### Student Task Statement

Use straightedge and compass moves to construct a square with segment $AB$ as one of the sides.



### 3 Trying to Circle a Square

#### Student Task Statement

1. Here is square $ABCD$ with diagonal $BD$ drawn:
	1. Construct a circle centered at $A$ with radius $AD$.
	2. Construct a circle centered at $C$ with radius $CD$.
	3. Draw the diagonal $AC$ and write a conjecture about the relationship between the diagonals $BD$ and $AC$.
	4. Label the intersection of the diagonals as point $E$ and construct a circle centered at $E$ with radius $EB$. How are the diagonals related to this circle?
	* 
2. Use your conjecture and straightedge and compass moves to construct a square inscribed in a circle.
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