Name: _____ Date: Dec 4 Hour: 5th

**Unit 4A: Day 3: Area of Squares**

*Focus Question: How can I find the area of a square?*

A. Squares:

1. What are the two requirements to be a square?

(1) 4 90° angles (2) all sides are =

2. How can you prove to someone that shape D is a square?

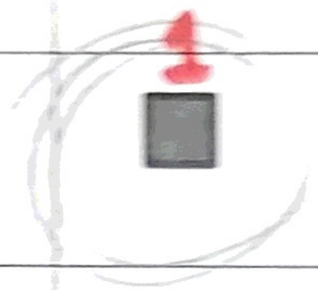
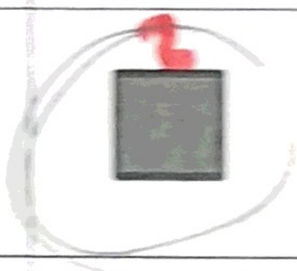
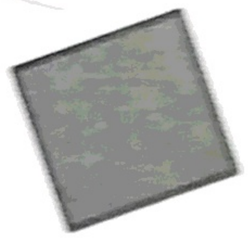
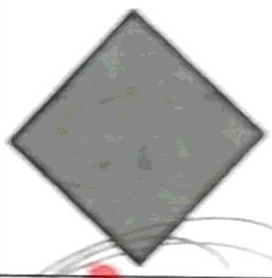
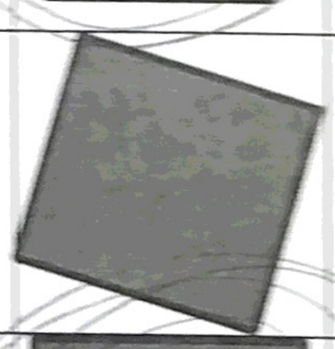
(1) lines are vertical & horiz. (2) all sides are 2

3. How can you prove to someone that shape B is a square?

(1) Slopes are opp rec.p. (2) its symmetrical (can fold in half)

4. Find the area of each square below. (Remember, you know how to find the area of a triangle if you can count the base and height?

B. Put the squares in order from **smallest** to **largest**:

| Letter of Square | Sketch | Area | Side length (if known) | How side length and area are related... |
|---|---|---|---|---|
| C |  | 1 | 1 | They're equal<br>1·1=1 |
| A |  | 2 | ? | ? |
| D |  | 4 | 2 | a+a=4<br>or<br>2·2=4 |
| F |  | 5 | ? | ? |
| B |  | 8 | ? | ? |
| H |  | 9 | 3 | 3+3+3=9<br>or<br>3·3=9 |
| E |  | 10 | ? | ? |
| G |  | 16 | 4 | 4+4+4+4=16<br>or<br>4·4=16 |

Make some observations about the squares that have the entire row filled in....

- "perfectly lined up" - not tilted, vertical & horiz.
- side length was counted
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These squares are called perfect squares because their side lengths are counting numbers and they are not tilted when drawn on a grid.