



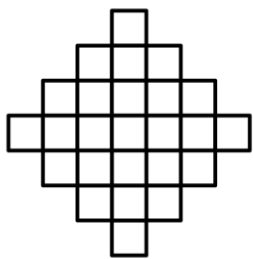


# Homework Practice 1-1-0: Contemplate then Calculate

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| <p><b>Contemplate then Calculate</b></p> <p><b>WHAT:</b> Practice looking for <i>shortcuts</i> using what you know about the way numbers and operations work.</p> <p><b>WHY:</b> to “think like mathematicians”, to use mathematical <i>structure</i> to find shortcuts.</p> | <p>Notice </p> <p>Find Calculation Shortcut </p> <p>Share and Study Shortcuts </p> <p>Reflect on Learning </p> | <p><b>Goal:</b></p> <p>Make connections between the structure of a shape and ways to efficiently count the number of objects within the shape.</p> |
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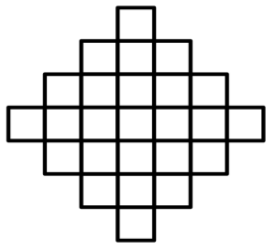
## QUESTION 1: Tilted Square

### NOTICE:



**NOTICE:** Look at diagram for 3 seconds, what did you notice? Describe the shape

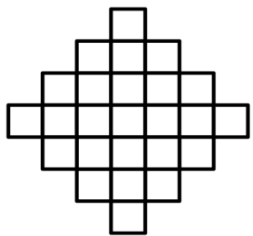
### SHORTCUT 1:



Find the TOTAL # of small squares

**SHORTCUT 1:** *What short cuts did you use to find the total # of squares? Show all work/Explain.*

### SHORTCUT 2:



Find the TOTAL # of small squares

**SHORTCUT 2:** *What short cuts did you use to find the total # of squares? Show all work/Explain.*

### REFLECT:

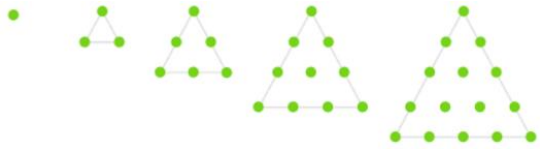
Paying attention to ... is helpful because...

You can find calculation shortcuts by...

**REFLECT:** *Choose a sentence frame and write a reflection.*

## QUESTION 2: Looking at Triangles

### NOTICE:



**NOTICE:** Look at diagram for 3 seconds, what did you notice?

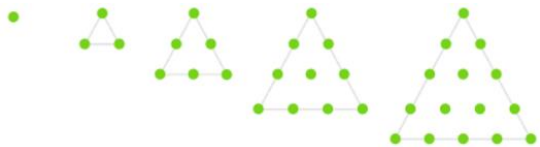
### SHORTCUT 1:



How many dots would the 6<sup>th</sup> triangle have?

**SHORTCUT 1:** *What short cuts did you use to find how many dots are in the 6<sup>th</sup> triangle?*

### SHORTCUT 2:



How many dots would the 6<sup>th</sup> triangle have?

**SHORTCUT 2:** *What short cuts did you use to find how many dots are in the 6<sup>th</sup> triangle?*

### REFLECT:

Paying attention to ... is helpful because...

You can find calculation shortcuts by...

The next time I will...before I calculate because...

**REFLECT:** *Choose a sentence frame and write a reflection.*