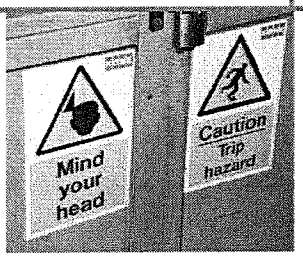
Ready, Set, Go!



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Ready

Topic: Defining bisectors of angles and perpendicular bisectors.

1. Based on the meaning of "bisect", which means to split into two equal parts, what would it mean to *bisect* an angle? Describe in words and also provide visuals to communicate the meaning of angle bisector.

2. What does it mean if you have a *perpendicular bisector* of a line segment? Provide both written explanation and visual sketches to communicate the meaning of perpendicular bisector.

Set

Topic: Use congruent triangle criteria and transformations to justify conjectures.

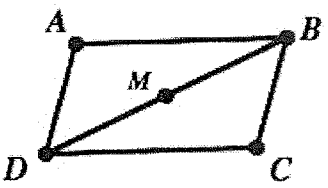
In each problem below there are some true statements listed. From these statements a conjecture (a guess) about what might be true has been made. Using the given statements and conjecture statement create an argument that justifies the conjecture.

3. True statements:

Point ***M*** is the midpoint of $\overline{DB}$

$\angle ABD \cong \angle BDC$

$\overline{AB} \cong \overline{DC}$



Conjecture: $\angle A \cong \angle C$

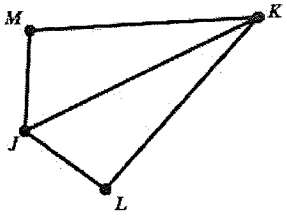
a. Is the conjecture correct?

b. Argument to prove you are right:

4. True statements

$\angle KJL \cong \angle KJM$

$\overline{JL} \cong \overline{JM}$



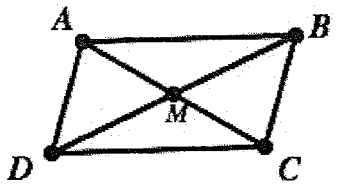
Conjecture: $\overline{JK}$ bisects $\angle MKL$

a. Is the conjecture correct?

b. Argument to prove you are right:

5. True statements

ΔADM is a 180° rotation of ΔCMB



Conjecture: $\Delta ABM \cong \Delta CDM$

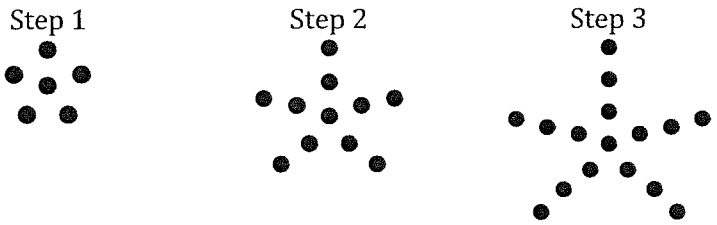
a. Is the conjecture correct?

b. Argument to prove you are right:

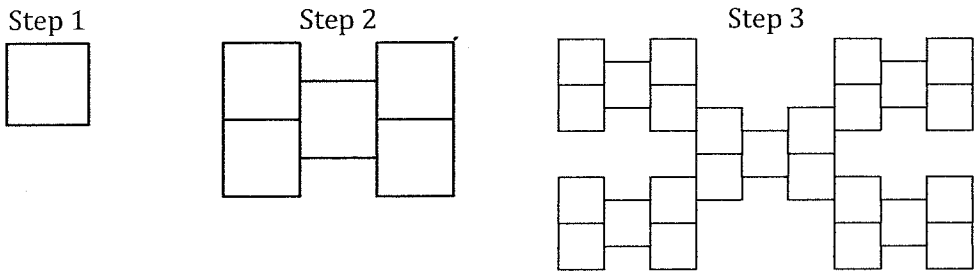
Go

Topic: Create both explicit and recursive rules for the visual patterns.

6. Find an explicit function rule and a recursive rule for dots in step *n*.



7. Find an explicit function rule and a recursive rule for squares in step *n*.



Find an explicit function rule and a recursive rule for the values in each table.

8.

Step	Value
1	1
2	11
3	21
4	31

9.

n	$f(n)$
2	16
3	8
4	4
5	2

10.

n	$f(n)$
1	-5
2	25
3	-125
4	625