

CYU 1.4 Perimeter, Area, & Polygons

Use when you get it right all by yourself
S *Use when you did it all by yourself, but made a silly mistake*
H *Use when you could do it alone with a little help from teacher or peer*
G *Use when you completed the problem in a group*
X *Use when a question was attempted but wrong (get help)*
N *Use when a question was not even attempted*

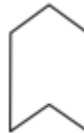
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Classifying polygons	1a	1b	6
Convex vs. Concave	1a	1b	2
Regular polygons	1		
Perimeter	2a, 4a	2b, 4b	5, 6c, 8
Area	3	7	4c, 6c
Distance Formula on a coordinate plane	3	2b, 4	2a, 5

1. Classify the polygon by the number of sides. Tell whether it is convex or concave. Regular?

a.

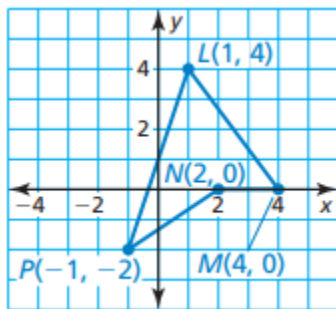


b.

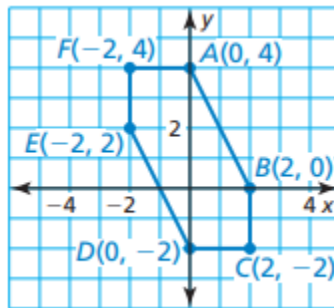


2. Find the perimeter of the polygon with the given vertices. State if the figure is convex or concave.

a.

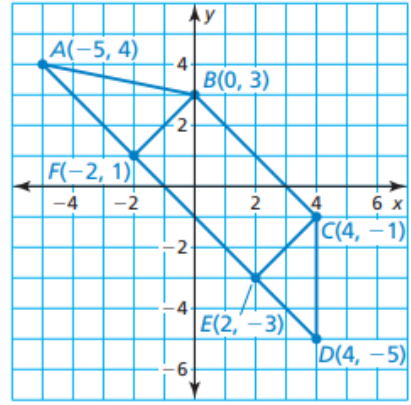


b.



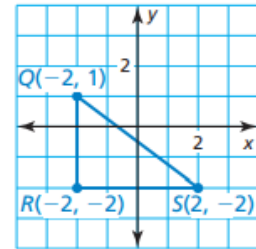
3. Find the area of the polygon with the given vertices: **W(0,0), X(0, 3), Y(- 3, 3), Z(- 3, 0).**

4. Use the diagram provided to find the following:
- perimeter of $\triangle CDE$.
 - Find the perimeter of quadrilateral ABCD.
 - Find the area of the quadrilateral ABCD.



5. Determine which points are the remaining vertices of a rectangle with a perimeter of 14 units.
- $A(2, -2)$ and $B(2, -1)$
 - $C(-2, -2)$ and $D(-2, 2)$
 - $E(-2, -2)$ and $F(2, -2)$
 - $G(2, 0)$ and $H(-2, 0)$
6. The lines $y_1 = 2x - 6$, $y_2 = -3x + 4$, and $y_3 = -\frac{1}{2}x + 4$ are the sides of a right triangle.
- Use slopes to determine which sides are perpendicular.
 - Find the vertices of the triangle.
 - Find the perimeter and area of the triangle.

7. Your friend claims that a rectangle with the same perimeter as $\triangle QRS$ will have the same area as the triangle. Is your friend correct? Explain your reasoning.



8. Triangle ABC has a perimeter of 12 units. The vertices of the triangle are $A(x, 2)$, $B(2, -2)$, and $C(-1, 2)$. Find the value of x .

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

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1	2	3	4	5	6	7	8
Basic		Intermediate			Advanced		Solved ALL!

