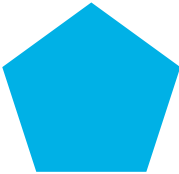

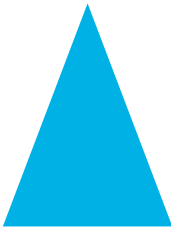
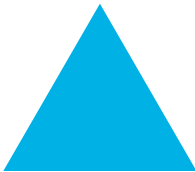


Regular or Irregular Polygons




Isaac would like a bit of help deciding which shapes are regular polygons and which are irregular polygons.

Can you say whether each shape is a regular or irregular polygon and explain why?



Shape	Regular/Irregular	Explanation
		
		
		
		

Regular or Irregular Polygons

Shape	Regular/Irregular	Explanation
		
		
		

Extension: Isaac says that 'a regular polygon has to have 4 or more sides that are all equal length — there is no maximum number of sides as long as all the angles are the same'. Is he correct? Why or why not?

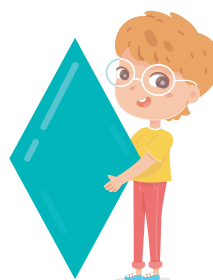


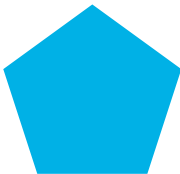

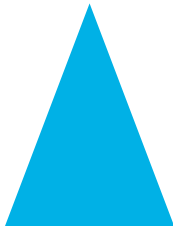
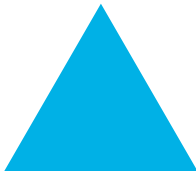
Regular or Irregular Polygons

Answers

Isaac would like a bit of help deciding which shapes are regular polygons and which are irregular polygons.




Can you say whether each shape is a regular or irregular polygon and explain why?



Shape	Regular/Irregular	Explanation
	Regular	All sides are the same length and all angles are the same size.
	Irregular	It has differently sized angles.
	Irregular	It has differently sized angles and its sides are different lengths.
	Regular	All sides are the same length and all angles are the same size.

Regular or Irregular Polygons

Answers

Shape	Regular/Irregular	Explanation
	Regular	All sides are the same length and all angles are the same size.
	Regular	All sides are the same length and all angles are the same size.
	Irregular	It has differently sized angles and its sides are different lengths.

Extension: Isaac says that 'a regular polygon has to have 4 or more sides that are all equal length — there is no maximum number of sides as long as all the angles are the same'. Is he correct? Why or why not?



Not completely — they can also have 3 sides, e.g. an equilateral triangle is a regular polygon. He is correct about everything else.