

## Task 1

### a. Polygons – true or false?






They have 5 or more sides    They are made up of straight lines    They are 3D shapes

They are 2D shapes    They are a closed shape (no gaps)



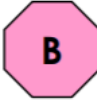
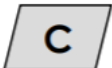


They include open shapes    They can have curved sides

### b. Have these shapes been sorted correctly? Explain your answer.

Shamir

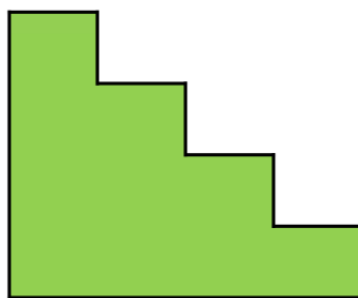
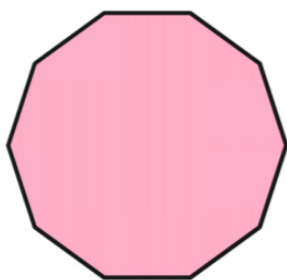
	Regular Polygon	Irregular Polygon
Has exactly 5 sides	 A	 D
Not 5 sides	 B  C	 E

Malia

	Regular Polygon	Irregular Polygon
Has exactly 6 sides	 A	 D
Not 6 sides	 B  C	 E  F

### b. True or false?

These shapes are both regular decagons



## Task 2

Samantha is trying to solve a jigsaw puzzle.

She has 6 jigsaw pieces left.

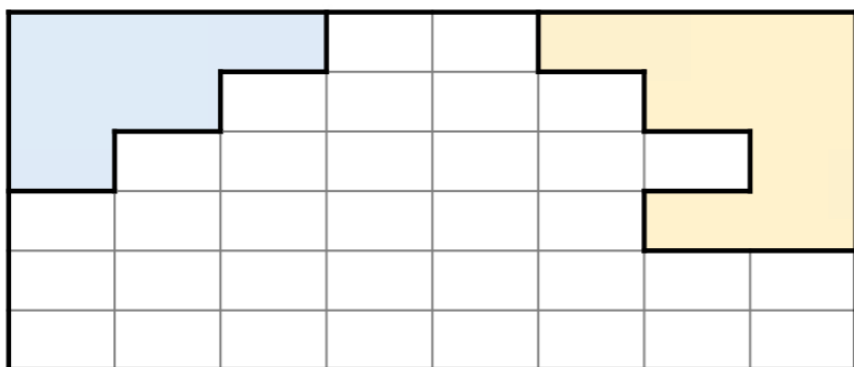
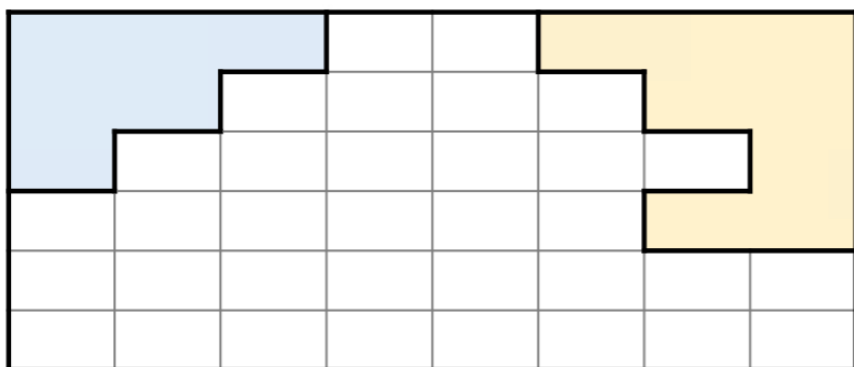
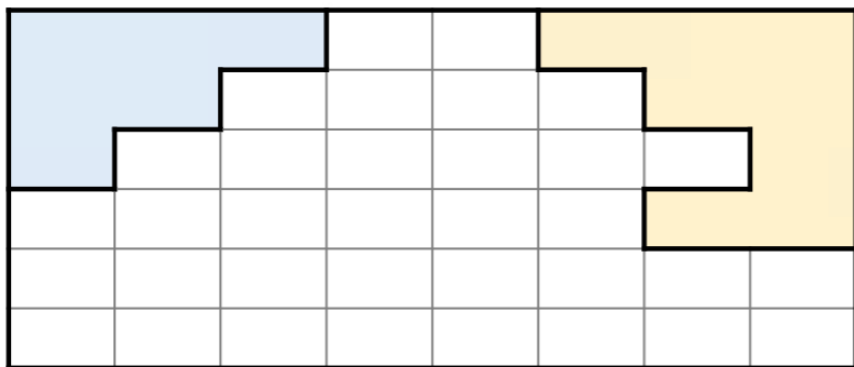
Investigate the possible missing jigsaw pieces below. Two have been done for you.

How many different combinations of jigsaw pieces can you create?

You could print out or draw the grids in your book.

She says,

**All the jigsaw pieces I have left are different sizes. They are all irregular polygons and have no more than 10 sides each.**



True	False
<p><b>They are a closed shape (no gaps)</b></p> <p><b>They are made up of straight lines</b></p> <p><b>They are 2D shapes</b></p>	<p><b>They are 3D shapes</b></p> <p><b>They include open shapes</b></p> <p><b>They can have curved sides</b></p> <p><b>They have 5 or more sides</b></p>

b

Shamir is incorrect. Shape E is irregular because it has different length sides and angles. Shape D is regular as it has sides of equal length and the angles are the same size.

Malia is incorrect. Shape C is an irregular polygon because it has different length sides and angles. Shape F is not a polygon due to its curved side. Shape D is a pentagon as it only has 5 sides.

c. False – one is regular, one is irregular.

**How many different combinations of jigsaw pieces can you create?**

**Various possible answers, for example:**

