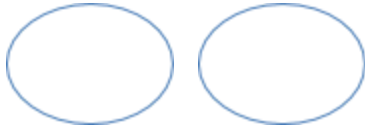


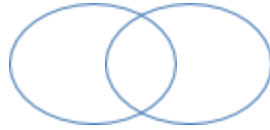
## Assessment 4

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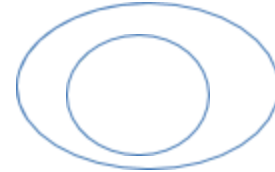
Q 1. Take a look at the three types of Venn diagrams.



Type 1



Type 2



Type 3

Which of the above diagrams represent the relationship between the sets of shapes given below:  
Explain why.

i. triangles and circles - \_\_\_\_\_

\_\_\_\_\_

ii. squares and parallelograms - \_\_\_\_\_

\_\_\_\_\_

Q 2. For each statement below, state TRUE or FALSE. Also justify your choice.

i. All squares are rectangles.  True  False

\_\_\_\_\_

ii. No rectangles is a parallelogram.  True  False

\_\_\_\_\_

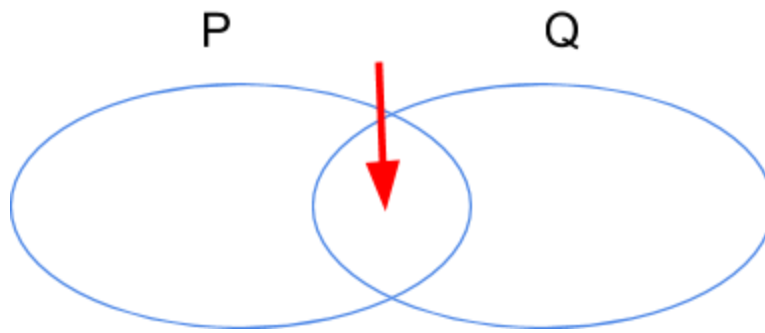
iii. Some rectangles are squares.  True  False

\_\_\_\_\_



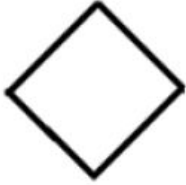

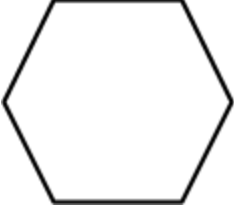
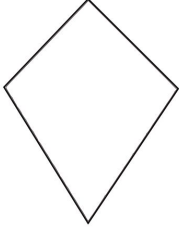
Q 3. In the diagram below,

P - is the set of quadrilaterals with both pairs of opposite sides equal, and all angles right angles.

Q - is the set of quadrilaterals with all sides equal.



Tick ALL the shape(s) that go in the area indicated by the arrow.

<p>A.</p> 	<p>B.</p> 	<p>C.</p> 
<p>D.</p> 	<p>E.</p> 	<p>F.</p> 

Q 4. Draw Venn diagrams in the space below to show the relationship between the following quadrilaterals:

- i. Rhombus (All sides equal) and Squares (All sides equal, all right angles)
- ii. Parallelogram (Opposite sides parallel) and Kite (2 pairs of adjacent sides equal)

Answer (i)	Answer (ii)
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Q5. Draw the following shapes in the space given. If the shape is not possible, say 'Not possible' and give reasons why.

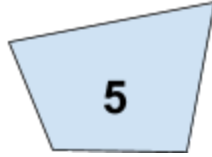
- i. A parallelogram that is NOT a rhombus.
- ii. A rhombus that is also a rectangle.
- iii. A rhombus that is NOT a rectangle.
- iv. A rhombus that is NOT a parallelogram.

i. A parallelogram that is <u>NOT</u> a rhombus.	ii. A rhombus that is also a rectangle.
iii. A rhombus that is <u>NOT</u> a rectangle.	iv. A rhombus that is <u>NOT</u> a parallelogram.

Q6. Write one property that a square has that a parallelogram need not necessarily have. \_\_\_\_\_

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Q 7. Which of the following figures are parallelograms?



Parallelograms	Not parallelograms