

Circle either TRUE or FALSE for each statement given below.

[3]

STATEMENT		
All circles are similar.	TRUE	FALSE
All squares are similar.	TRUE	FALSE
All triangles are similar.	TRUE	FALSE
All rectangles are similar.	TRUE	FALSE
All regular hexagons are similar.	TRUE	FALSE

Intermediate Maths June 2017 P2 Q2

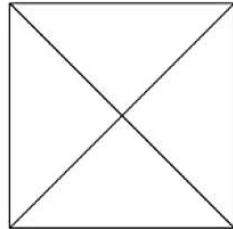
Circle either TRUE or FALSE for each of the following statements.

[3]

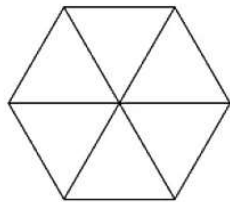
A triangle with one angle equal to 70° could be an equilateral triangle.	TRUE	FALSE
A triangle with one angle equal to 70° could be an isosceles triangle.	TRUE	FALSE
A triangle with one angle equal to 70° could be a right-angled triangle.	TRUE	FALSE
An isosceles triangle could have one of its angles equal to 105° .	TRUE	FALSE
A right-angled triangle could have one of its angles equal to 105° .	TRUE	FALSE

Intermediate Maths Summer 2018 P2 Q2

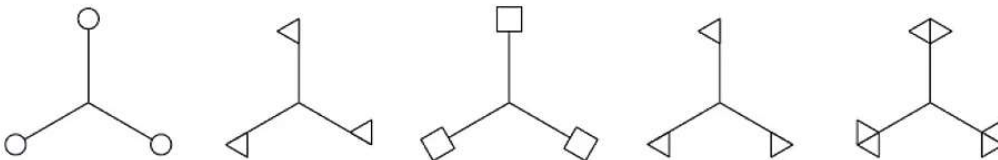
- (a) The square drawn below has rotational symmetry of order 4.
Place **two** identical dots (●) on the square so that it will have rotational symmetry of order 2. [1]



- (b) The regular hexagon drawn below has rotational symmetry of order 6.
Place **three** identical dots (●) on the regular hexagon so that it will have rotational symmetry of order 3. [1]

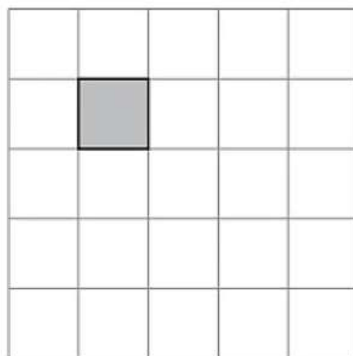


- (c) Which of the following shapes has rotational symmetry of order 3, but has **no** line symmetry?
Circle the correct shape. [1]

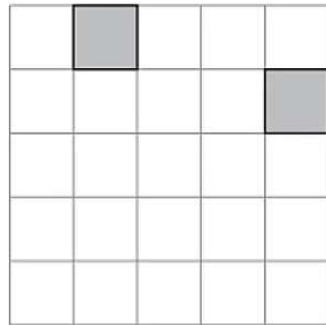


Intermediate Maths Summer 2019 P1 Q3

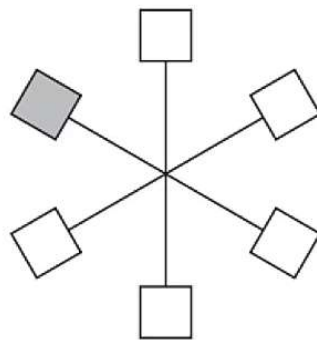
- (a) Shade **one square** so that the diagram below has rotational symmetry of order 2. [1]



(b) Shade **two squares** so that the diagram below has rotational symmetry of order 4. [1]



(c) Shade **two squares** so that the diagram below has rotational symmetry of order 3. [1]



Intermediate Maths Nov 2016 P2 Q8

Circle either TRUE or FALSE for each statement given below.

[2]

STATEMENT	TRUE	FALSE
All equilateral triangles are congruent.		
All squares with equal areas are congruent.		
Circles with equal perimeters are congruent.		
All regular octagons are congruent.		

Intermediate Numeracy Nov 2018 P1 Q3b

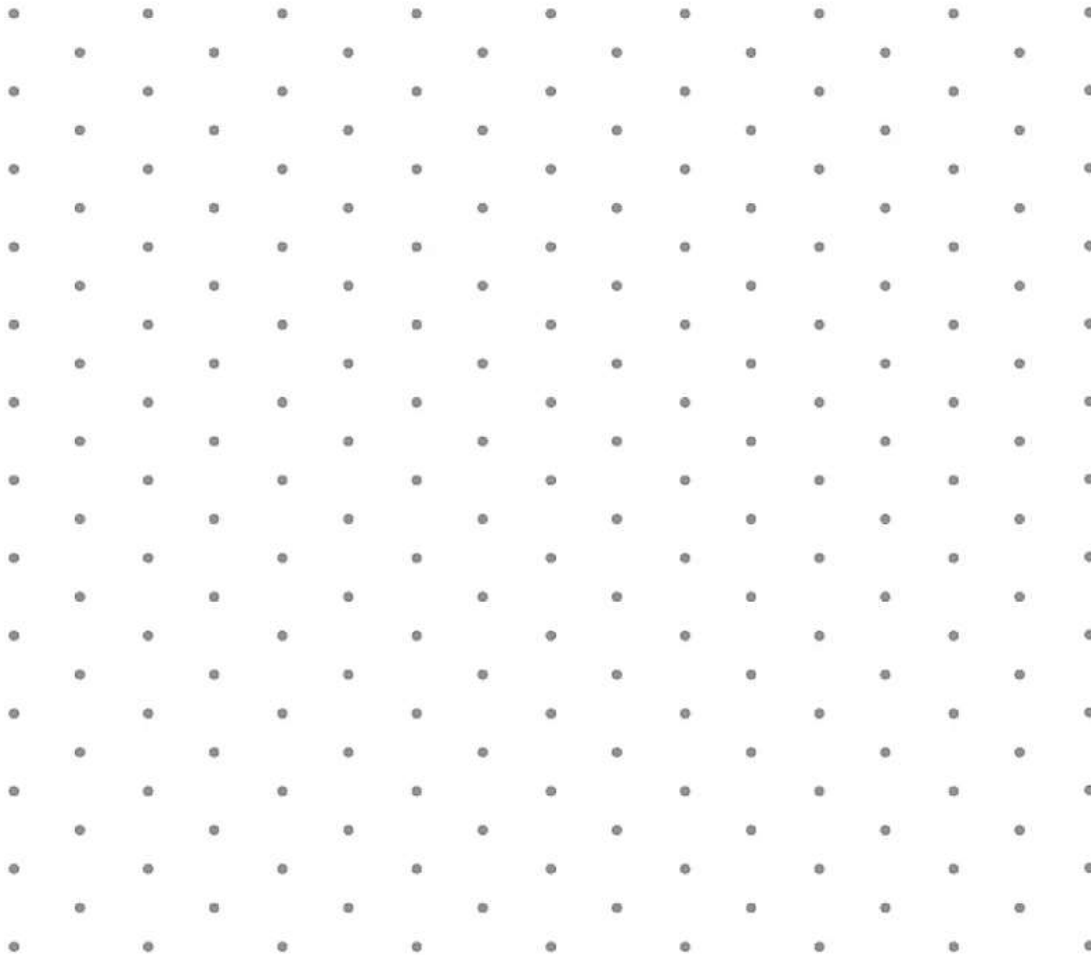
(c) *Tref-tiles* has 5 boxes of tiles on special offer.
All the tiles in each box are identical.

Box	A	B	C	D	E
Shape of tile	Square	Rhombus	Regular pentagon	Right-angled triangle	Circle

3 of these boxes contain tiles that tessellate.
Manon is asked to select these 3 boxes.
Which **3 boxes** should Manon select?

[2]

- (a) Draw an isometric representation of a cuboid measuring 6 cm by 4 cm by 3 cm. Use the grid below. [2]



- (b) Calculate the volume of the cuboid. Give the units of your answer. [3]

Intermediate Maths Nov 2017 P1 Q8

Look at the following descriptions of special quadrilateral shapes. Circle the correct name for each one.

- (a) Its diagonals intersect at 90° . Only one diagonal is a line of symmetry. [1]

Kite Rhombus Square Trapezium Rectangle

- (b) Only one pair of sides are parallel. [1]

Kite Rhombus Square Trapezium Rectangle

- (c) All four sides are equal.
Its diagonals are not equal in length.

[1]

Kite

Rhombus

Square

Trapezium

Rectangle

Intermediate Maths Sample 2 P2 Q11

Circle either TRUE or FALSE for each statement given below.

[2]

STATEMENT		
Circles with diameters of equal length are congruent.	TRUE	FALSE
Regular pentagons whose perimeters are of equal length are congruent.	TRUE	FALSE
Scalene triangles that have the same three angles are congruent.	TRUE	FALSE
Rectangles with equal areas are congruent.	TRUE	FALSE

Intermediate Maths Sample 2 P1 Q12

4. You will be assessed on the quality of your organisation, communication and accuracy in writing in this question.

Prove that it is possible for a square, a regular pentagon, a regular hexagon and an isosceles triangle with two equal angles of 69° to meet at a point as shown below.

[6 + OCW 2]

