



**Spring Hill International School**

**1<sup>st</sup> Assessment**

Scholastic Year 2020/ 2021

---

Student's Name:

Class & Section: Grade 8

Teacher's Name: Raghda Ziad

Subject: Math / Checkpoint

Test Duration: 30 mins

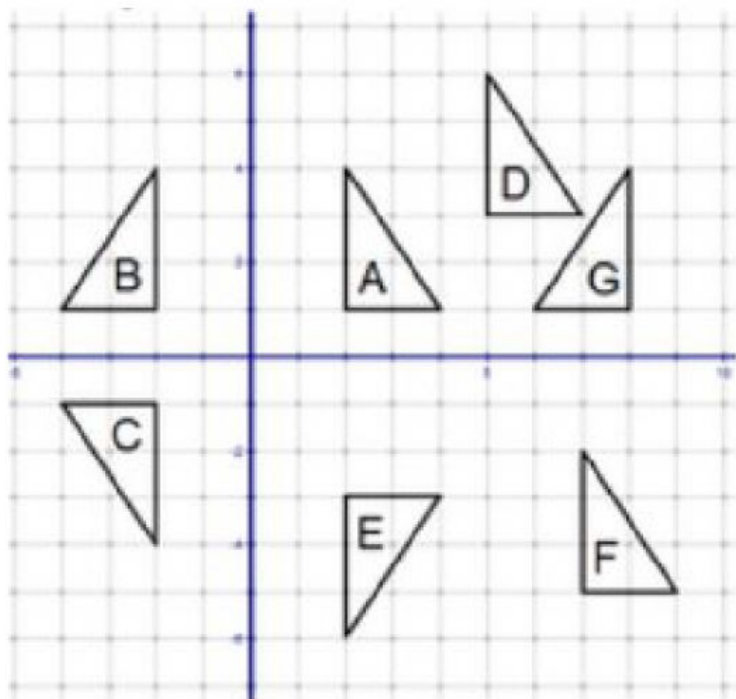
Date: 2 / March. / 2021

No. of Questions: 4

No. of Pages: 5

Question Number	Q.1	Q.2	Q.3	Q.4	Total Mark
Student's Mark					
Question Mark	5	5	5	10	25

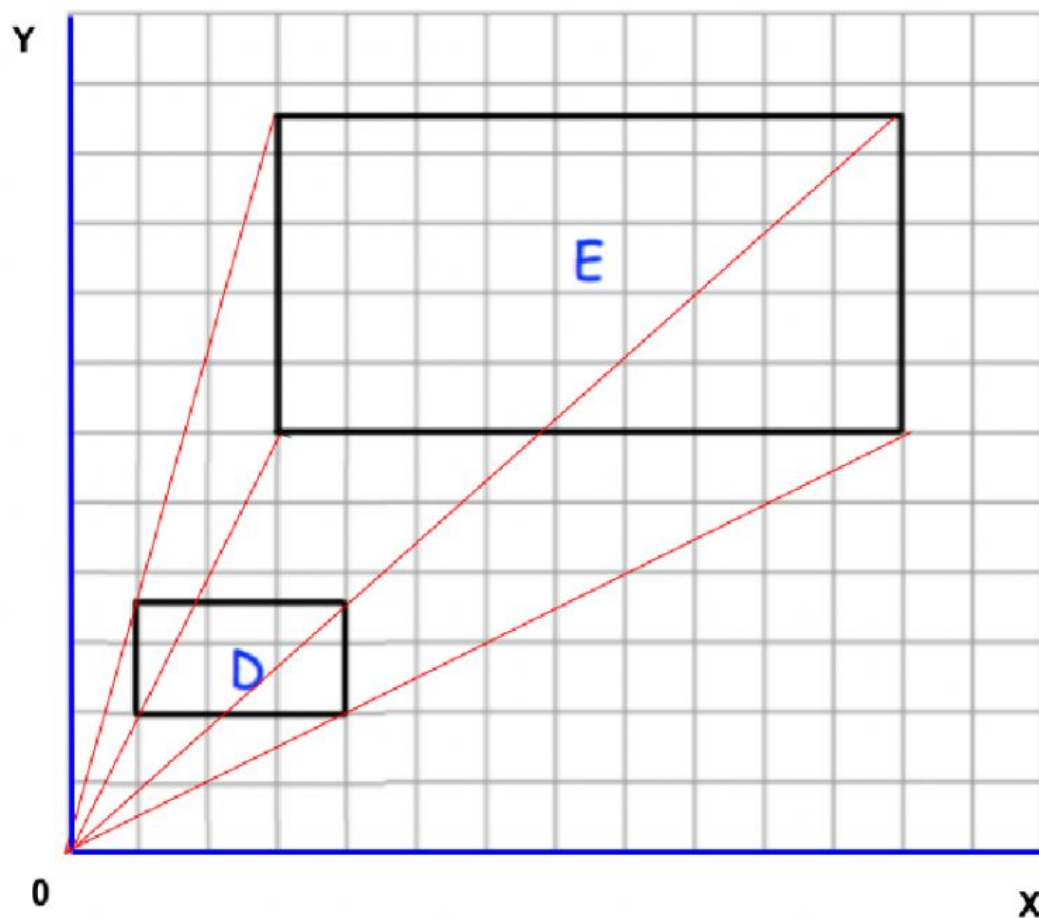
Question no.1: Fully describe the following transformation as shown



G to E	Rotation , anti-clockwise , center ( 5,-1 ) , 180 degree
A to G	Reflection around the line $X = 5$
B to C	
A to D	
A to E	
A to C	
A to F	

Question no.2: Enlargement

A) Use the following graph to answer the questions below



What's the center and the scale factor of the shown enlargement

Center of enlargement (   ,   )

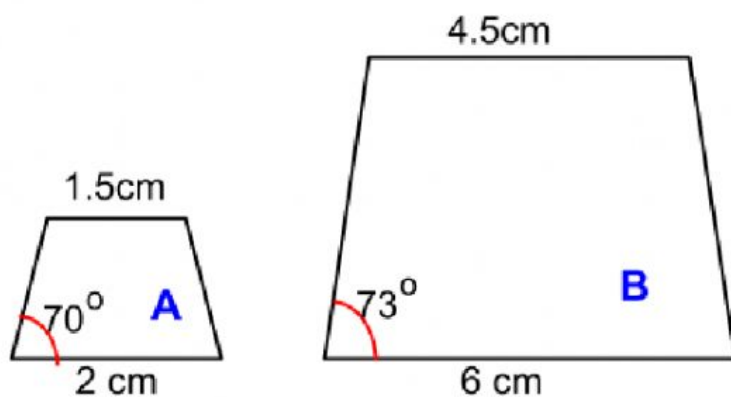
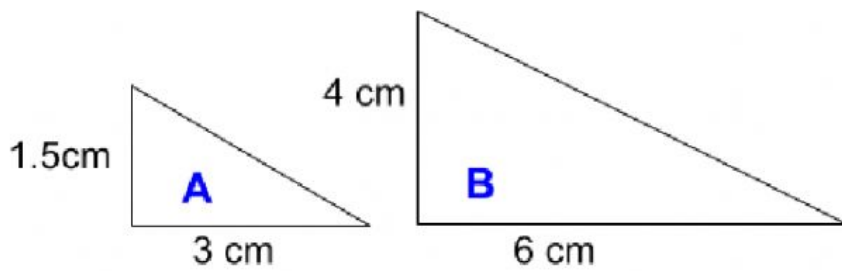
Scale factor

If rectangle E was enlarged by a scale factor 20 to give rectangle F.  
Write down the length and width of rectangle F :

Length

Width

B) In each shape explain why B cannot be an enlargement of A



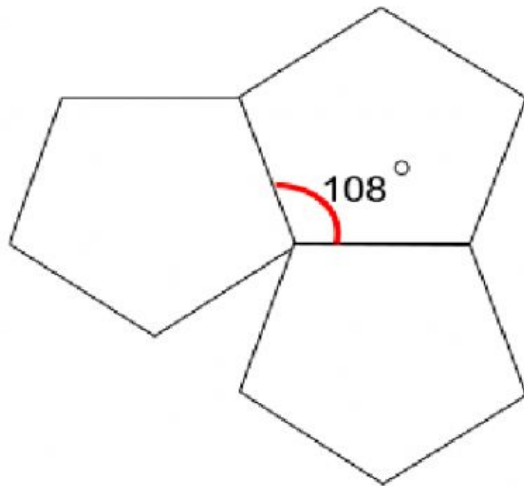
### Question no.3: Tessellations

A) The table shows the interior angles for different regular polygons .

Select the regular polygons that can be tessellated

Number of sides	Interior angle
3	$60^\circ$
4	$90^\circ$
5	$108^\circ$
6	$120^\circ$
7	$128.6^\circ$
8	$135^\circ$

B) Explain why a regular pentagon does not tessellate

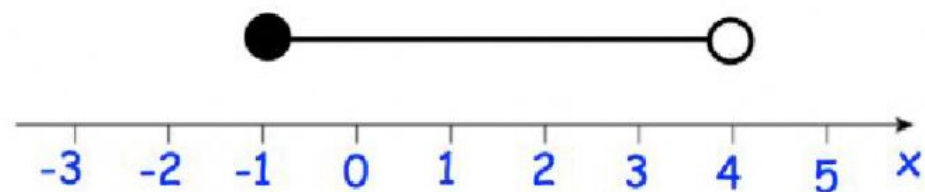
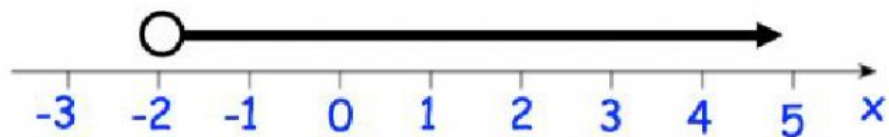
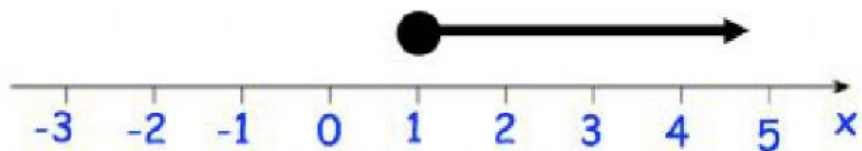


C) Are these statements true or false

Any quadrilateral can be tessellated	True	False
A regular octagon tessellates	True	False
A regular polygon will only tessellate if its interior angle is a factor of $360^\circ$	True	False

Question no.4: Inequalities

A) Write down the inequalities shown in the following diagrams



B) Solve the following inequalities

$$5X - 1 \leq 9$$

$$4 + 2X > X + 7$$

$$25 < 10X + 5 < 40$$

$$3(2X - 7) \geq 33$$

C) Write down all the integer values of X that satisfies the following inequalities

$$-3 < X < 2$$

$$1.5 < 3X \leq 6$$

$$3 > X - 11 \geq -5$$