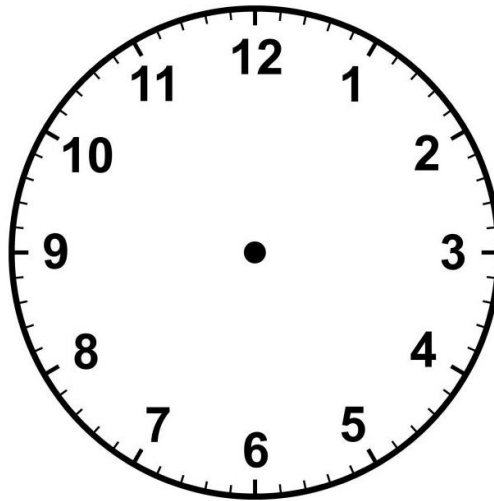


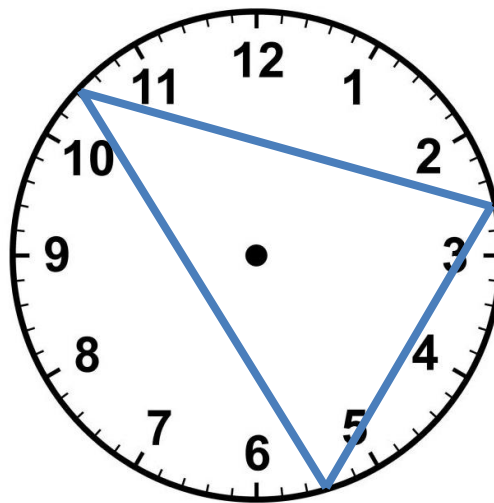
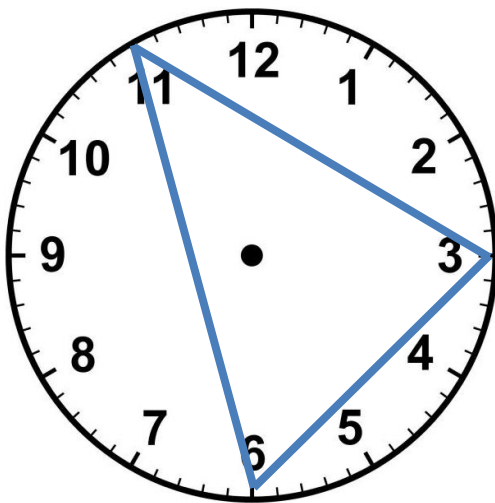
CLOCKFACE POLYGONS.

Using a basic clock face, try to draw the shapes required but you must keep the vertices or corners on the hour numbers 1 to 12 and not between, unless specifically asked for.



eg ALLOWED

NOT ALLOWED



(a) How many equilateral triangles can you draw?



Extention: Draw Star of David on a clock face.

How many Stars of David can be drawn?

(b) How many **SQUARES** can you draw only on the hour numbers?

Extention: To draw a square in this position:
you cannot do it on the hours.



Find its exact position on the clock face.

Now draw an Islamic Star:

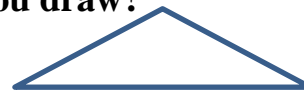


(c) Draw a regular **HEXAGON**

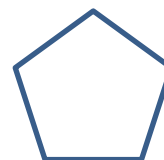


How many hexagons can be drawn using only the hours as vertices?

(d) How many **ISOSCELES** triangles could you draw?
(not counting equilateral triangles)



(e) If we want a regular **PENTAGON** on the clock face, we cannot
have the hour numbers for all the vertices.
Find the exact positions for the vertices.



(f) How many **RIGHT ANGLED** triangles can be drawn?



(g) **VERY CHALLENGING:** How many triangles can be drawn including
scalene, isosceles, equilateral and right angled?