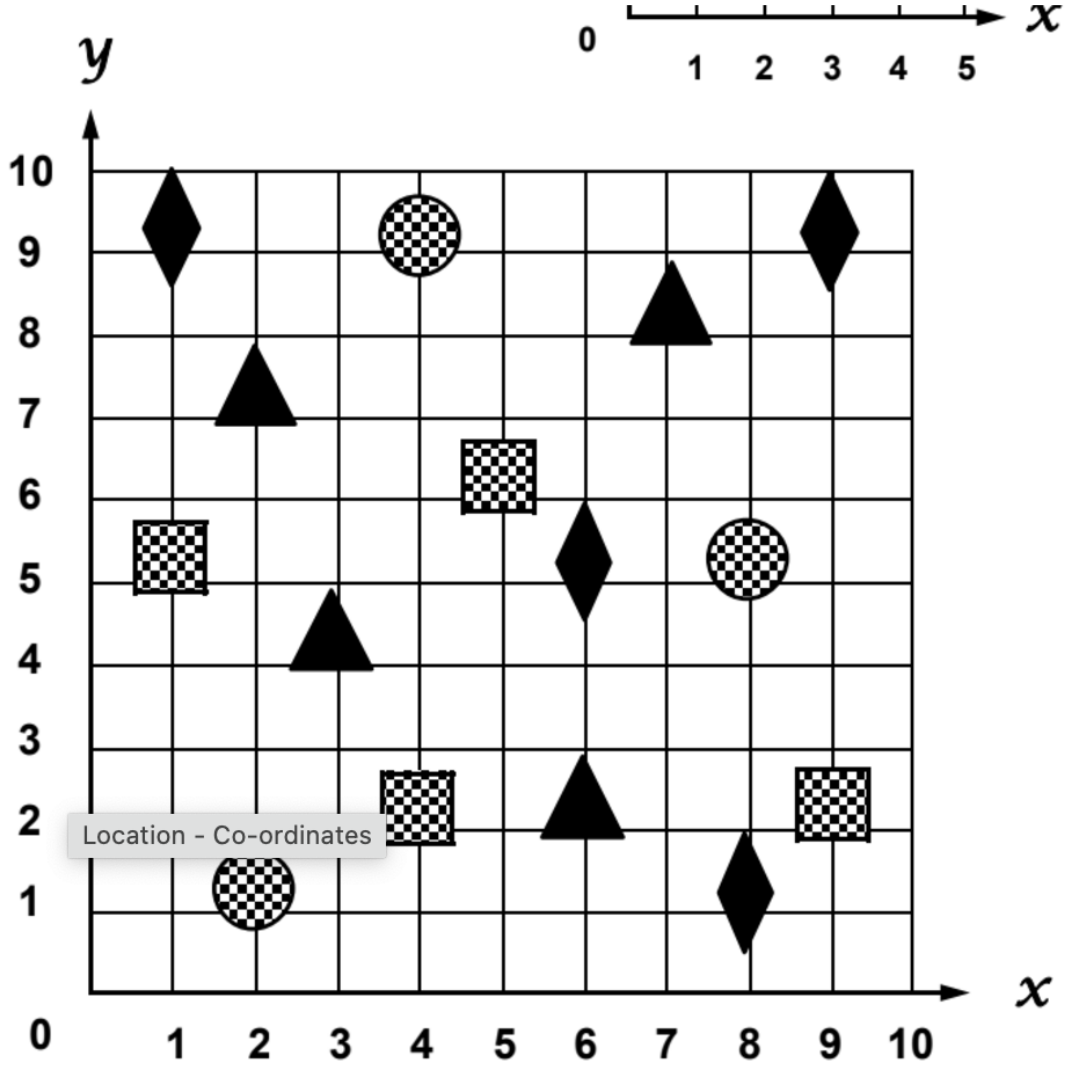
Task 21

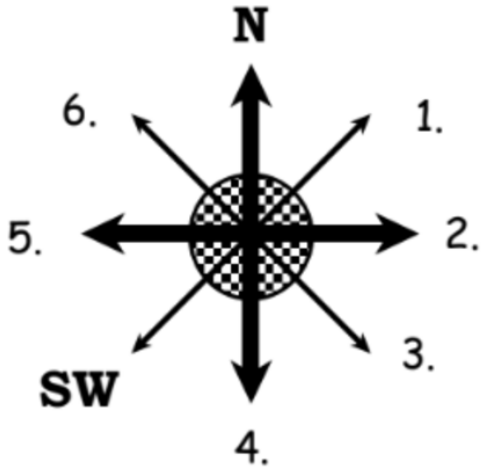
On this graph there are various mathematical shapes drawn.

1. What shape is at the point (6,5)?
2. **List** the co-ordinates to locate all the triangles.
3. **List** the co-ordinates to locate all the squares.
4. **List** the co-ordinates to locate all the circles.
5. **List** the co-ordinates to locate all the diamonds.

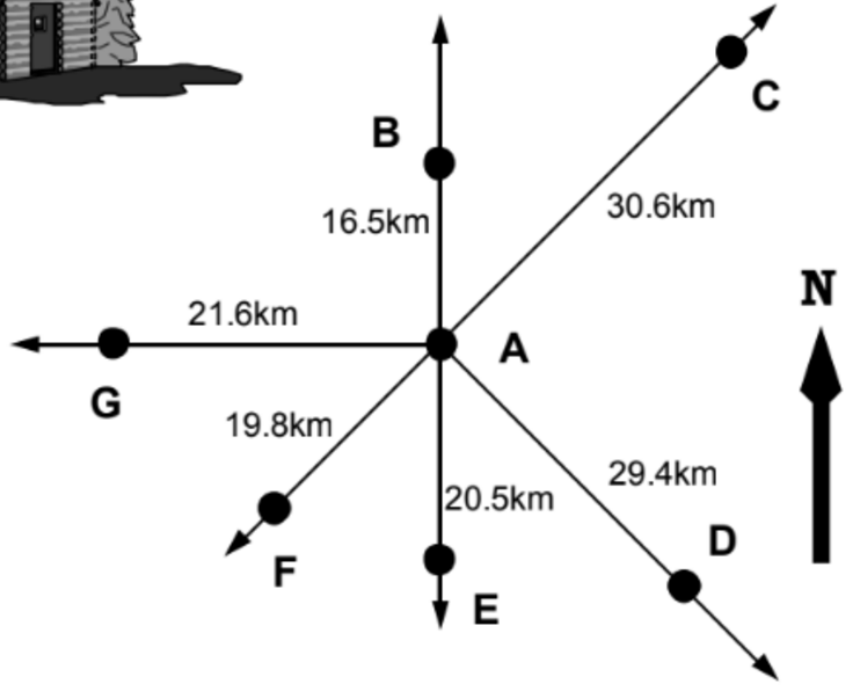


Task 22

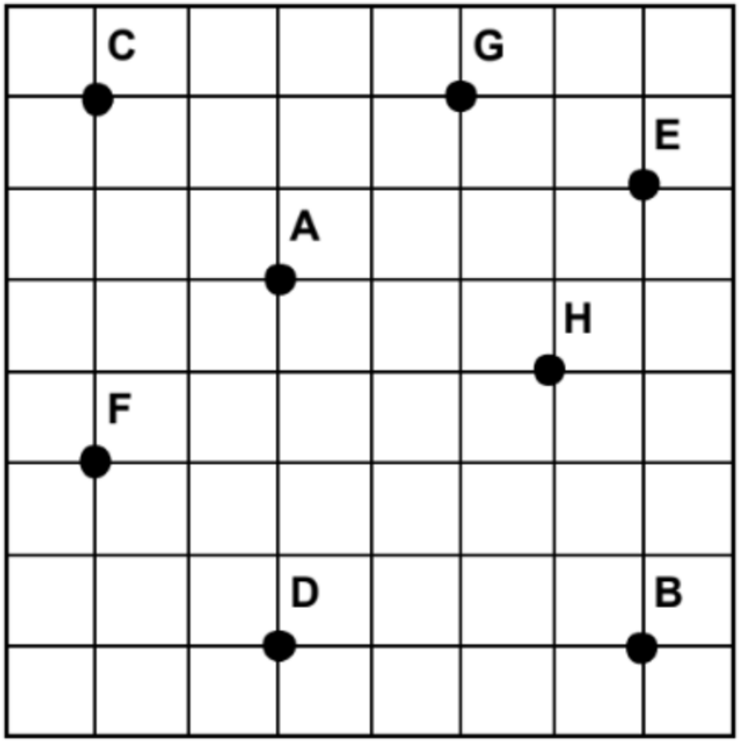
Copy this diagram of a compass and fill in the missing directions numbered 1 to 6.



On this diagram each letter represents a town and the distances between **Town A** and all other towns are shown.

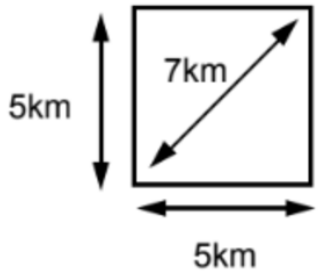


7. Which town is 20.5km away from Town A?
8. Which town is west of Town A?
9. Give the **compass directions** and **distances** required to travel from Town A to all other towns, B to G.



This grid is a scale diagram showing the positions of various towns, represented by the letters A to H. The side of a square represents 5km and the diagonal is 7km.

Example:



The distance from **A** to **B** would be 4 × 7km = 28km, direction SE.

Calculate the **distance** and give the **direction** you would travel to go between the following towns.

11.	B to D	12.	A to D	13.	F to A
14.	H to D	15.	B to C	16.	E to B
17.	F to C	18.	C to A	19.	G to F

20. Kelly is going to draw a scale diagram of a school playground area.
Using the **compass directions** and a **measuring tape**, she collected the following information.

- The play ground area is 10 metres square.
- Right in the middle is a tower (T).
- 3 metres N of the tower is a slide (S).
- 4 metres east of the tower is a swing (W).
- In the NE corner there is a netball hoop (H).
- 7 metres south of the netball hoop there is a drinking tap (D1).
- In the SW corner there is a basketball hoop (B).
- 6 metres north of the basketball hoop there is another drinking tap (D2).

Use the information that Kelly collected to **draw a plan** of this playground in your maths book.

Use a scale of 1cm = 1m.

Location - Compass Points