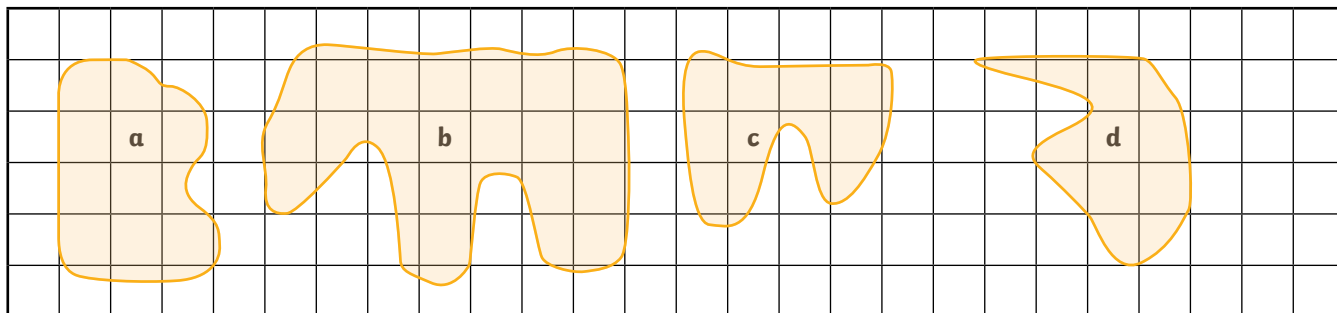
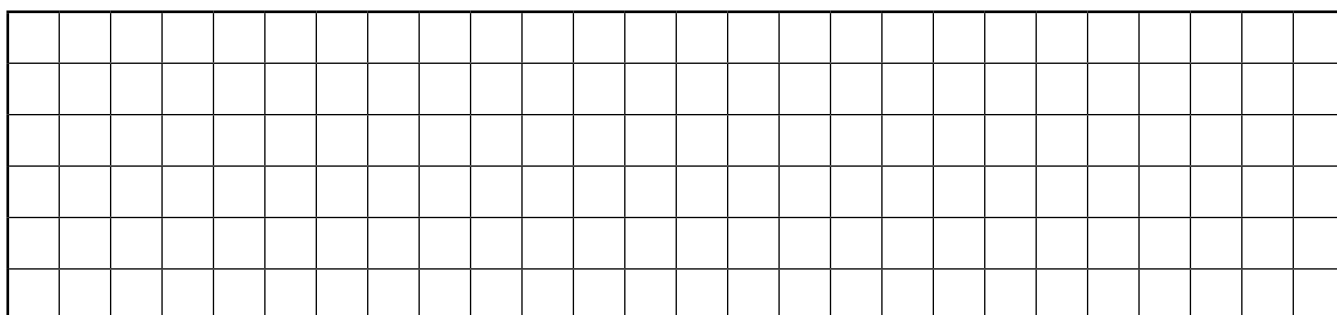


1) Estimate the size of each shape on this grid, in squares:



2) On this grid, draw an irregular shape with an estimated area of 9cm^2 .



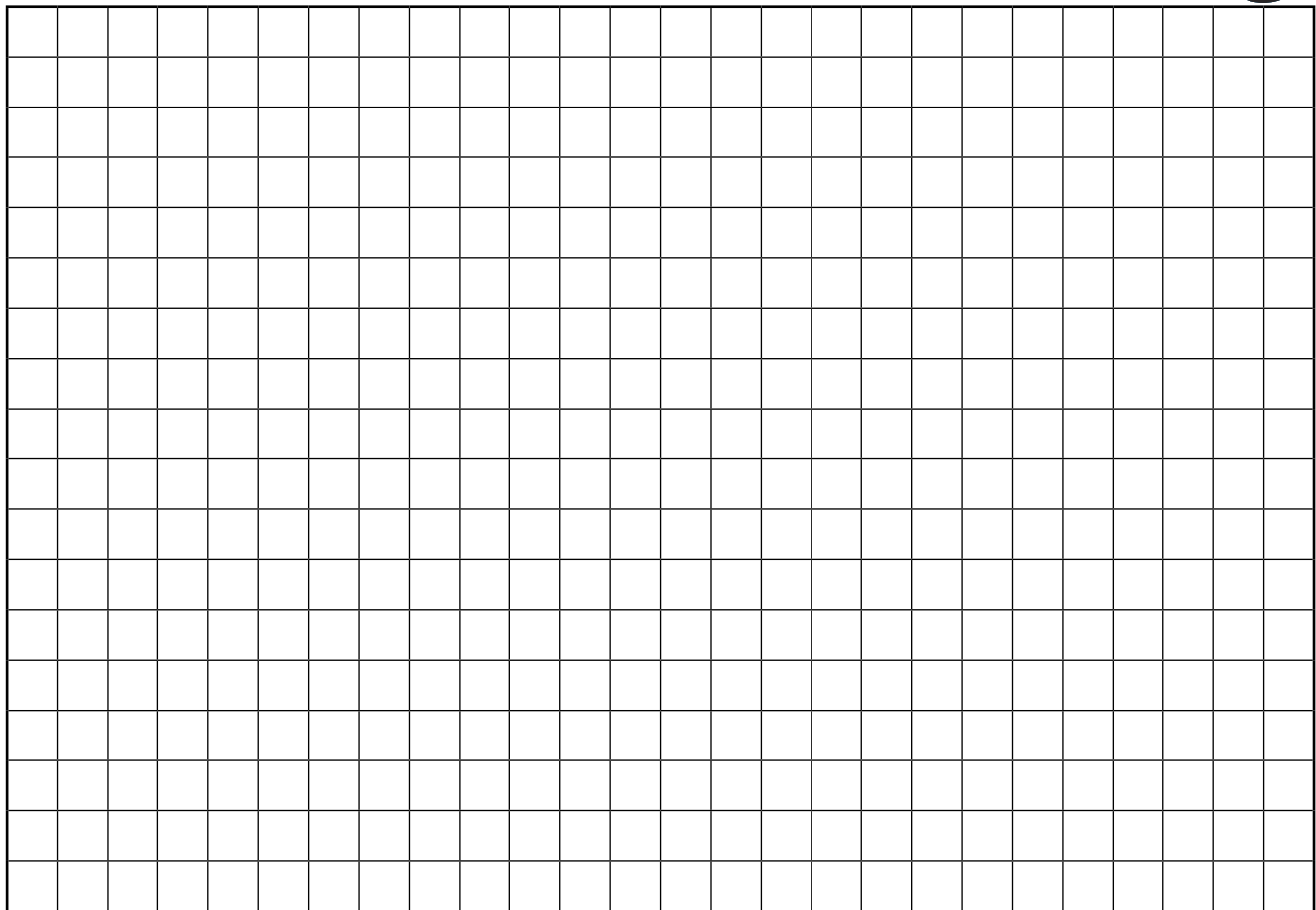


1) On this grid, draw a series of circles which have areas of approximately:

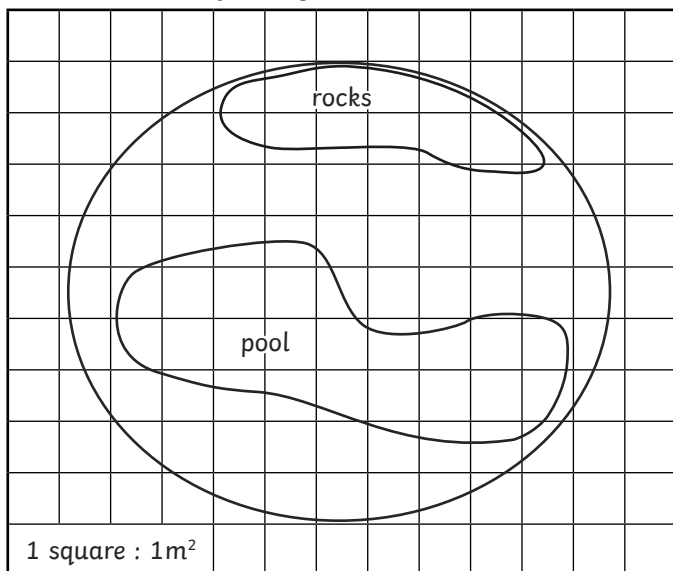
a) 12cm^2

b) 28cm^2

c) 50cm^2



2) Look at this map of a penguin enclosure:



Caryn says,

"I estimate the pool and rocks together have an area of 30m^2 ."

Jay says,

"I think the pool, on its own, has an area of around 29m^2 ."

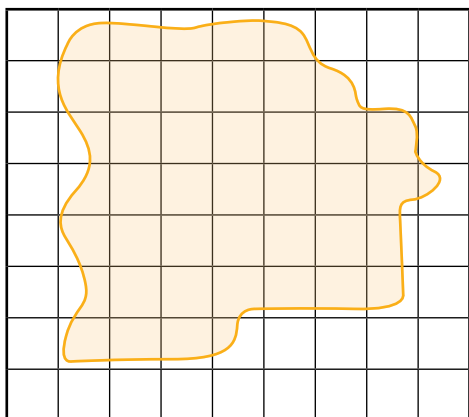


Who do you agree with?

Explain the mistake that one of the children has made.



1) Twinkl Zoo is opening a new area. On their planning map, the designers have shaded this irregular shape where building can take place.



Each square represents 10m^2 .

They would like to open a 120m^2 penguin enclosure and a 70m^2 otter enclosure, both with curved walls.

Plan where the 2 enclosures could fit. Remember there will need to be space between them.

2) Challenge: design your own zoo enclosure layout made up of irregular shapes on the grid.

- Each square represents 1m^2 .
- At least 120m^2 must be open area for animals to roam.
- At least 20m^2 must be indoor pens.
- At least 20m^2 must be water.
- You need to allow space for visitors to move around the area.

