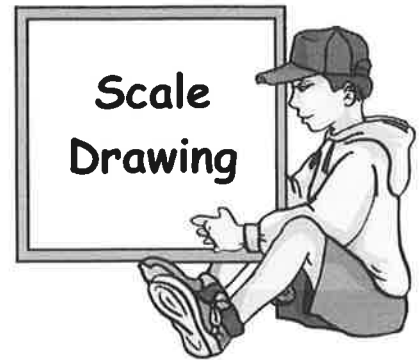


CHAPTER 6

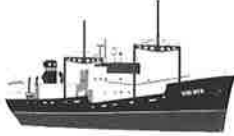
Consolidation



- How many degrees are there from :-
 - West to North (clockwise)
 - South to North (clockwise)
 - North West to West (anti-clockwise)
 - South to North East (clockwise)
 - SE to NE (clockwise)
 - W to SW (anti-clockwise).

- A coach was heading North West when it came to a roundabout. The driver turned his steering wheel through 45° anti-clockwise. In which direction was the coach then travelling?



- 

A cargo ship was sailing North East. It then made a 90° turn anti-clockwise. In which direction was the ship now sailing?

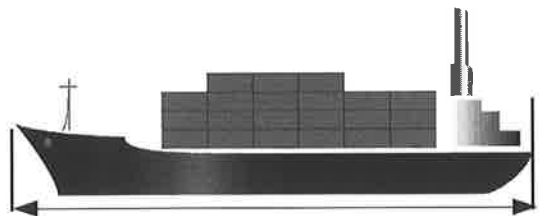
- Use a ruler and protractor to draw an accurate diagram showing :- the path of a caterpillar crawling 6 cm NE, then 5 cm South, then 3 cm SW.



Exercise 1

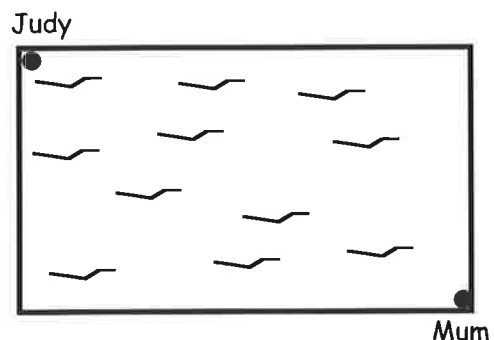
- The picture has been drawn using a scale :-
 $1 \text{ cm} = 10 \text{ m}$.

- Measure the length of the ship.
- Calculate the **real** length of the ship.



- Shown is a scale drawing of a swimming pool. The scale is $1 \text{ cm} = 6 \text{ m}$.

- Measure the length and breadth of the swimming pool.
- Calculate the **real** length and breadth of the swimming pool.
- Judy swims from one corner of the pool to her mum at the opposite corner of the pool.



How far does Judy swim to reach her mum ?

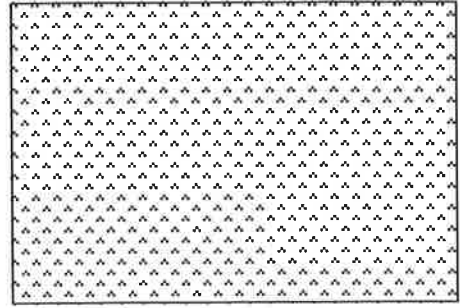
3. A farmer's rectangular field is drawn on a plan.

The scale of the plan is $1 \text{ cm} = 70 \text{ m}$.

The length of the field on the plan is 10 cm.

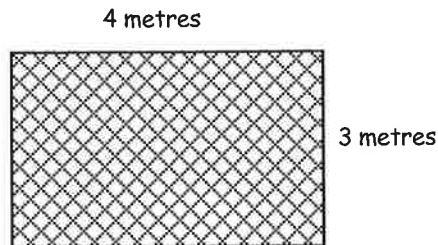
The breadth of the field is four fifths of the length.

- Find the **real** length and breadth of the field, in metres.
- Calculate the **perimeter** of the farmer's field.



Exercise 2

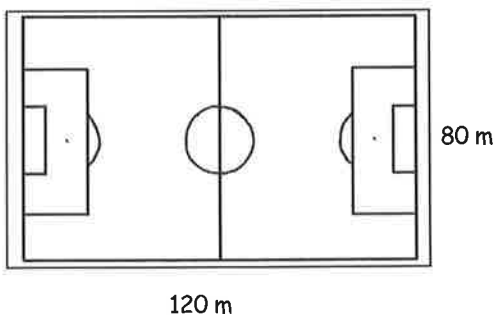
1. This is a plan of a tiled rectangular conservatory floor.



Make an accurate scale drawing of the room using a scale of :-

$$1 \text{ cm} = \frac{1}{2} \text{ metre.}$$

2.

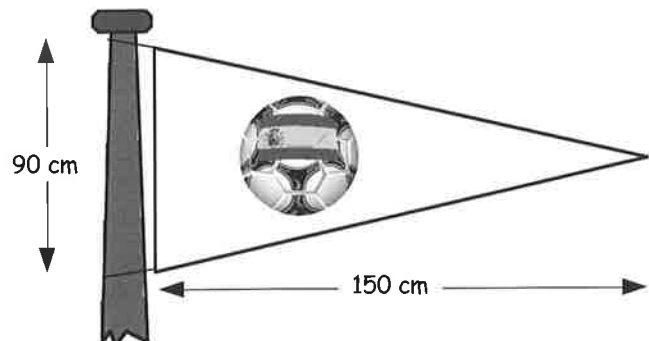


This is a sketch of a football pitch.

Make an accurate scale drawing of it using the scale :-

$$1 \text{ cm} = 20 \text{ metres.}$$

- This triangular flag measures 90 centimetres by 150 centimetres. Make a scale drawing of the flag.
Scale :- $1 \text{ cm} = 30 \text{ cm}$.

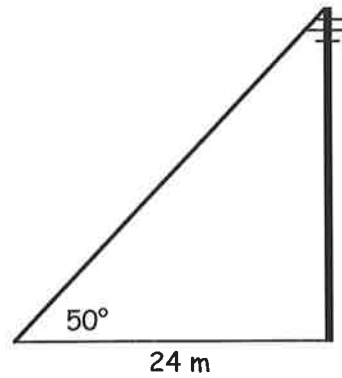


Exercise 3

1. a Use a ruler and protractor to make a scale drawing using the scale :-

$$1 \text{ cm} = 4 \text{ m.}$$

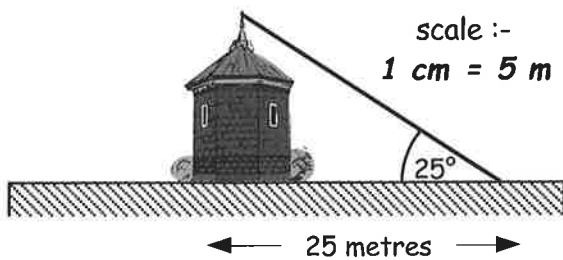
- b Calculate the real height of the telegraph pole, in metres.



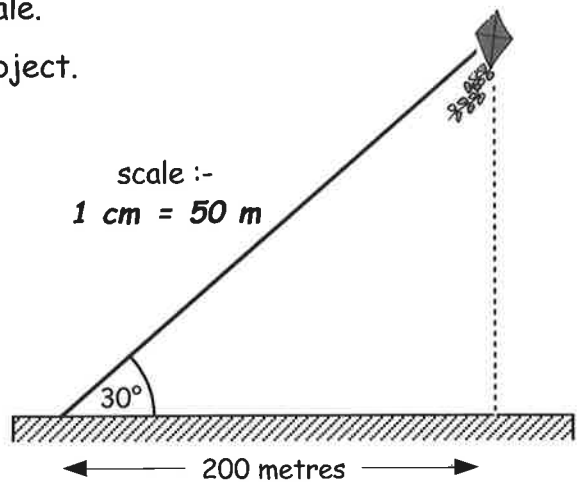
2. For each of the following,

- Make a scale drawing using the given scale.
- Calculate the real height of the given object.

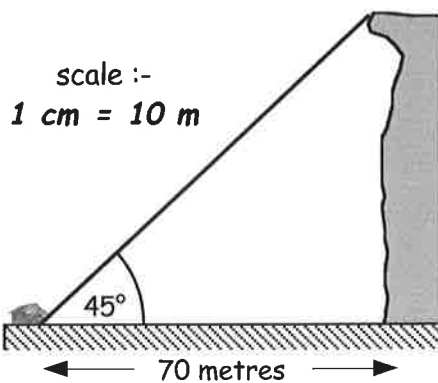
a



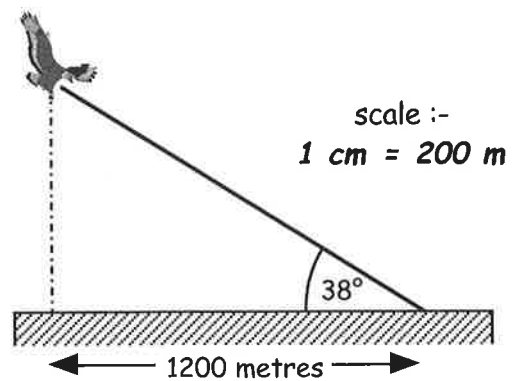
b



c



d



Exercise 4

1. Write each of the following compass directions as a **3 figure bearing** :-

a West

b South West

c North West

d South

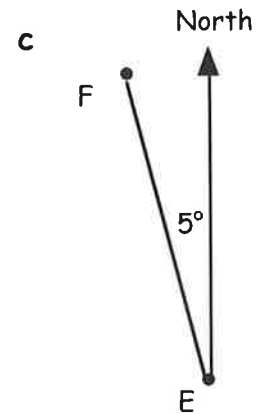
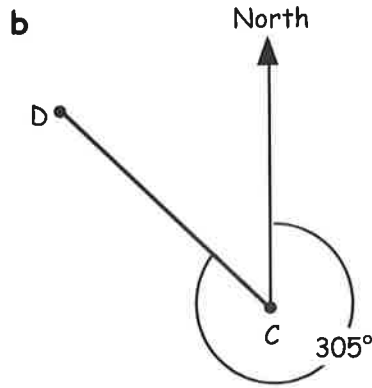
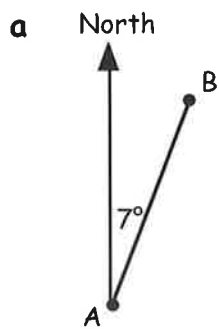
e North

f East.

2. Which compass point direction would I be heading on if I was travelling on a bearing of :-

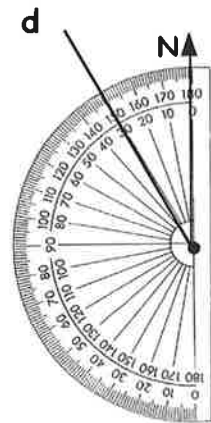
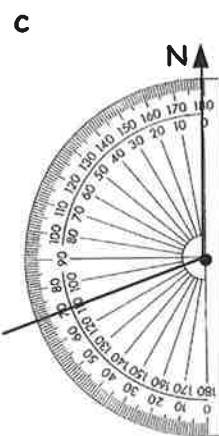
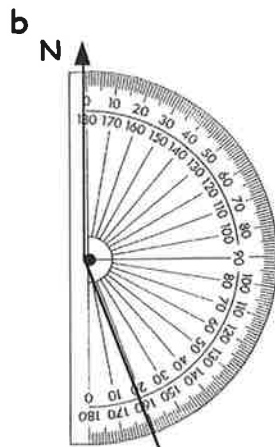
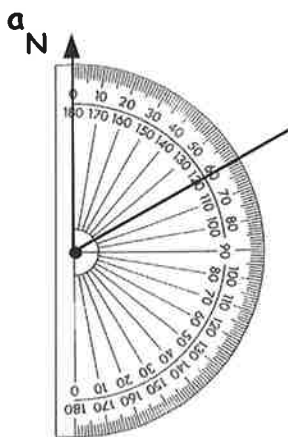
- a 045° b 225° c 315° d 000°.

3. For each of the following directions, write down the 3 figure bearing :-

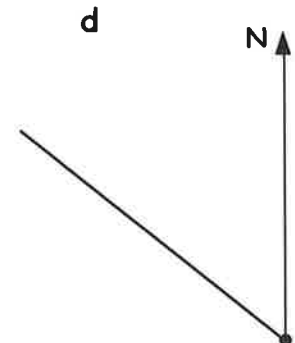
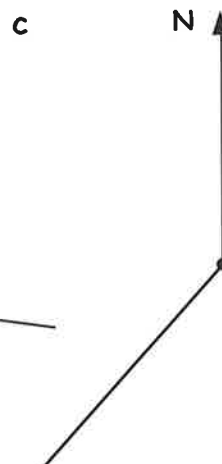
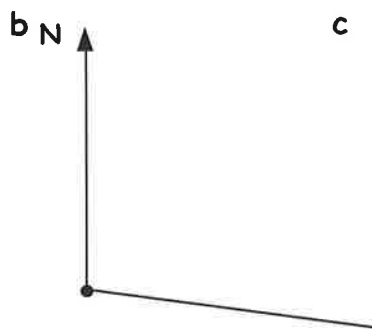
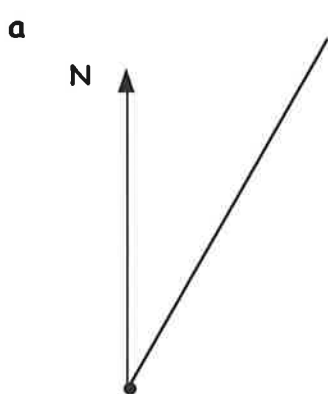


Exercise 5

1. Write down the 3-figure bearing for each of the following :-



2. Using a protractor, write down the 3-figure bearing for each of the following :-

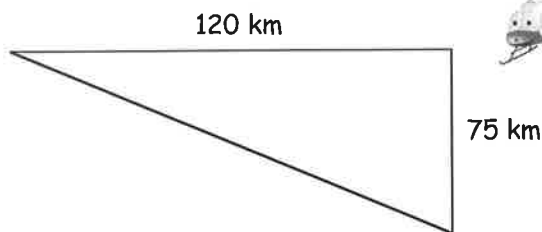


Revision Exercise

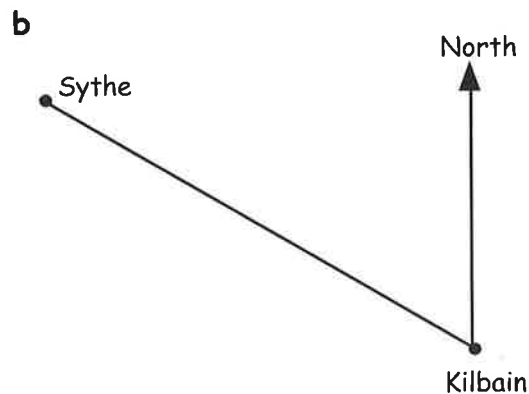
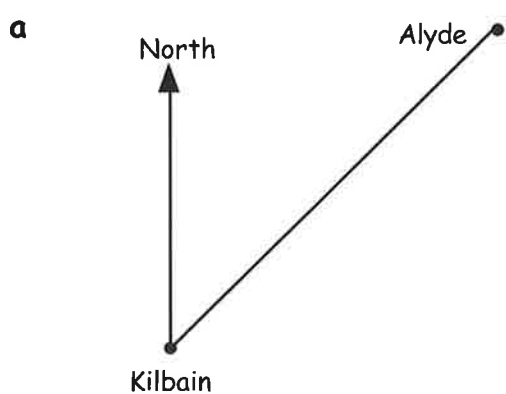
- The scale on a map is given as :- $1 \text{ cm} = 100 \text{ metres}$.
On this map the Brooklyn Bridge is 18.25 cm in length.
Find the **real** length of the Brooklyn Bridge.



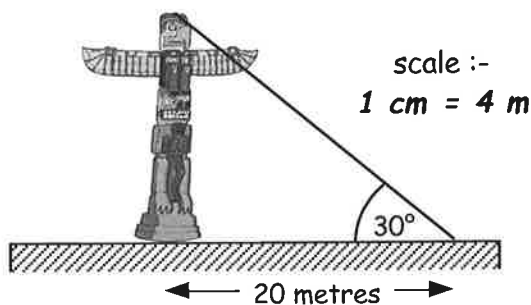
- Make a scale drawing for each sketch below using the scales given :-
 - $1 \text{ cm} = 5 \text{ cm}$
 - $1 \text{ cm} = 15 \text{ km}$



- How many degrees **anti-clockwise** between :-
 - S and NW
 - SW and NE ?
- Measure and write down the bearing of both towns Alyde and Sythe from Kilbain.



- Make a scale drawing of the diagram shown using a scale of $1 \text{ cm} = 4 \text{ m}$.



- Measure the height of the pole on your diagram and find its **real** height.