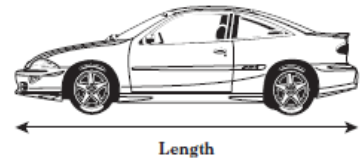


You will require a ruler and protractor/angle measurer.

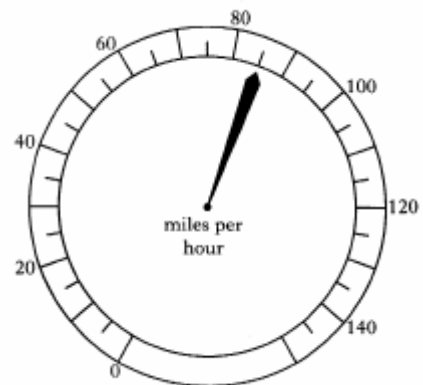
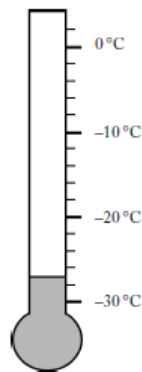
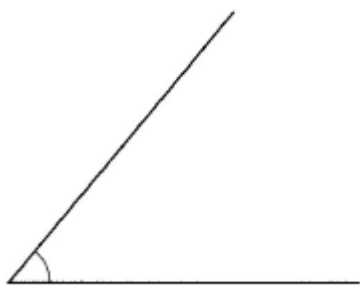
Essential knowledge:

1. Measure the length of the car on the right in millimetres. Using the scale $1\text{cm} = 100\text{mm}$, find the actual length of the car in metres.

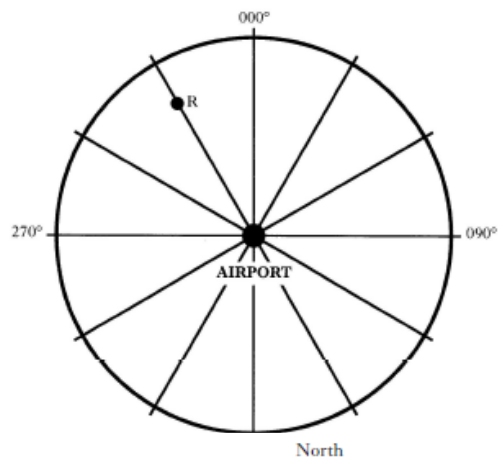


2. Write down the measurement shown in each scale on the right:

3. Measure the angle below:



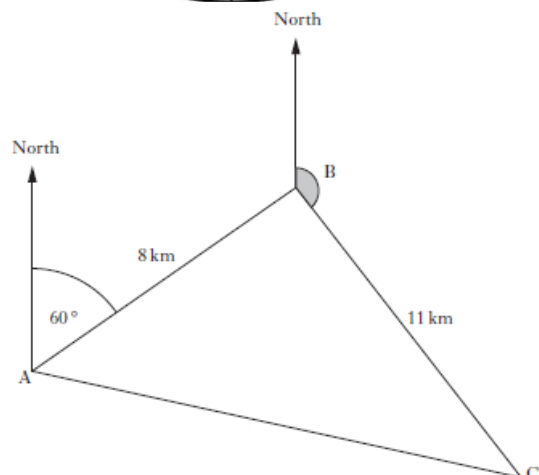
4. Write down the bearing of the aircraft marked R from the airport.



5. A boat sails from A to B - 8km on a bearing of 060°

It then sails a further 11km on a bearing of 155° from B to C.

Using a scale of $1\text{cm} = 2\text{km}$, make a scale drawing of the boat's route and find the direct distance from the start of the journey to the finish.



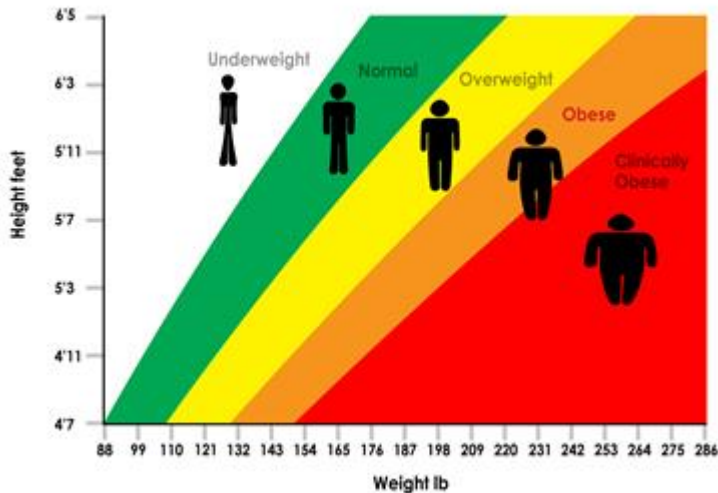
Unit level:

6. A boat leaves from a harbour on a bearing of 045° for a distance of 20 miles to Puffin Island.

The boat leaves Puffin Island on a bearing of 170° and travels for a further 35 miles to Gull Isle.

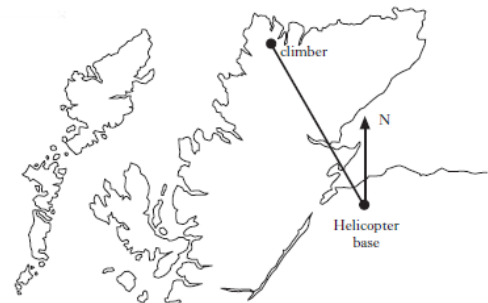
- (a) Construct a scale drawing to illustrate this journey
- (b) Use your scale drawing to determine the bearing and distance of Gull Isle from the harbour.

7. Mairi who is 5 foot 8 inches weighs herself.
What weight category does Mairi fall into?



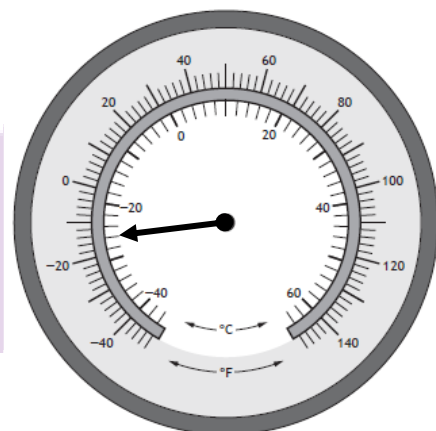
Assessment level:

8. If the climber is 125km from the helicopter base, calculate the scale used for the drawing?

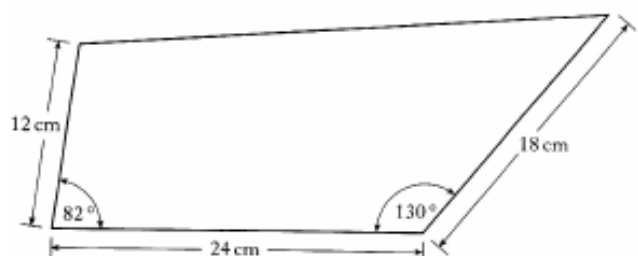


9. Lynn is flying an aircraft and has been told that the ground temperature is 34 °C warmer than the temperature outside the plane.

Use Lynn's temperature gauge to calculate the ground temperature.



10. Using a scale of 1:3, make a scale drawing of the panel on the right?



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ACADEMY