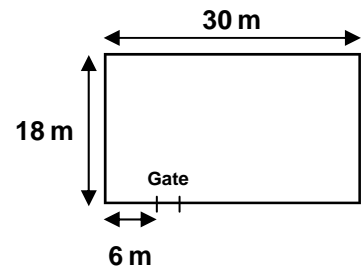


Building a Sports Court

FM2.26



We are planning to build an all weather sports court in our park.



The court will be **rectangular** and will be surrounded by a fence.

ALL WEATHER SPORTS SURFACE
£11.30 per square metre

- [1] (a) Work out the **area** of the court.
(b) Calculate the **cost** of covering the court with an all weather sports surface.

- [2] Draw a **scale drawing** of the court.
Use a scale of **1 cm : 2 m**



Work out the length and width of the court for your scale drawing first.

The fence will be built using posts and panels.

One of the panels will include a gate and will cost **£172**.

- [3] Mark the position of the fence posts on your scale drawing.

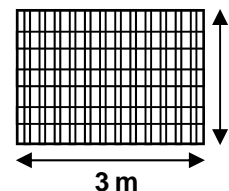
- [4] (a) How many fence posts are needed ?
(b) How many **ordinary** fence panels are needed ?
(c) Work out the cost of buying the posts, panels and the **gate panel**.

Post £28

Panel £65



3.2 m



2.4 m

3 m

Distance between fence posts



- [5] (a) Calculate the **total cost** of the fence and the all weather surface.
(b) **VAT of 20%** has to be paid on the total cost. Work out how much VAT will have to be paid.



There will be four floodlights around the edge of the court.

- [6] Each floodlight lights up the ground within **10 metres** of its base. Show where the floodlights should be placed on your scale drawing so that they light up as much of the court as possible.

