How to . . .

The diagram shows the plan of a playground.

80 m ③
30 m
40 ①
60 m
50 m ③ 30 ②
this isn't needed →
40 m
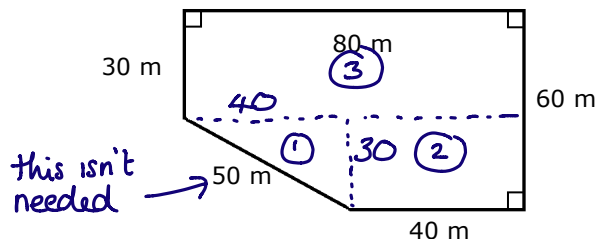
Bill is going to cover the playground with tarmac. It costs £2.56 to cover each square metre with tarmac.

Work out the total cost of the tarmac Bill needs.

$$\text{shape } ① = \tfrac{1}{2} \times 40 \times 30 = 600 \, m^2$$

$$\text{shape } ② = 40 \times 30 = 1200 \, m^2$$

$$\text{shape } ③ = 30 \times 80 = 2400 \, m^2$$

Total area = 600 + 1200 + 2400 = 4200   **(4)**

Total cost = 4200 × 2·56 = 10752

The cost of the tarmac is £10,752

Now have a go yourself . . .

1) Karl wants to make a rectangular lawn in his garden, he wants the lawn to be 30 m by 10 m. Karl buys rectangular strips of turf 5 m long and 1 m wide. Each strip of turf costs £3.49

Work out the total cost of the turf that Karl needs to buy.

2) A wall is a 300 cm by 250 cm rectangle. The wall is to be tiled. The tiles are squares of side 50 cm.

Work out how many tiles are needed.

3) A rectangle is 9 cm by 4 cm. A square has the same area as the rectangle. Work out the length of the side of the square.

4) A landscape gardener charges:

£40 per square metre for levelling the ground and laying paving stones.

£15 per square metre for levelling the ground and sowing grass seed.

Calculate the cost of both paving and seeding the garden shown on the right.

10 m
2 m — paving
10 m — Grass
12 m
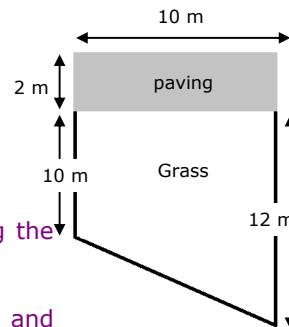
MAKE SURE YOU WRITE A STATEMENT WITH YOUR FINAL ANSWER INCLUDED.

Exam Questions

Mel has saved £600 to spend on carpeting her front room.

There are four types of carpet that she likes:

Natural twist £14.50 per m^2

Medium twist £17.60 per m^2

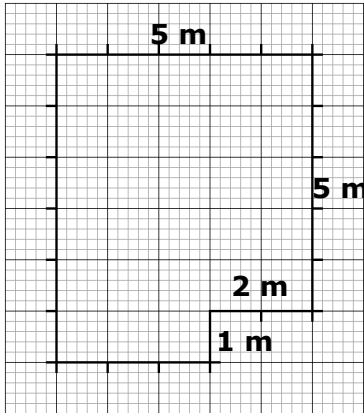Heavy weave £19.00 per m^2

Luxury pile £24.90 per m^2.

She also needs to buy underlay which is available in two types:

Super cushion at £4.00 per m2

Cushion at £2.00 per m2.

Fitting is £50 extra.

What can she afford to buy?

5 m

5 m

2 m

1 m

(5)

Ready to be marked ?

Keywords

Things to remember ...

What went well ...

Teacher comment ..