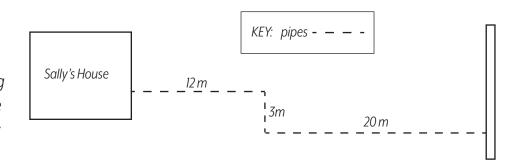
Calculating Costs - Length and Area

- 1) What is the total cost of 20 metres of plastic piping at £15 per metre?
- 2) Sally needs to replace the pipes that carry water from her house to the street as shown.

Calculate the total cost of replacing the pipes if Sally needs to purchase the pipes and hire a plumber to lay the pipes.



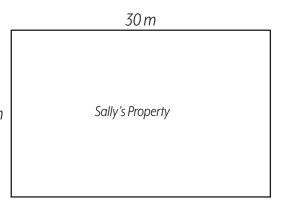
Cost to buy the pipes at £15 per metre

Plumbing installation costs - £12 per metre _____

total cost: _____

3) Sally wants to replace the fence that surrounds her entire property. What is the total cost for a fence that costs £32 per metre?

20 m



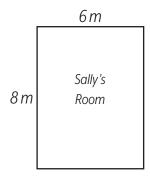
4) Sally wants to lay carpet in the room shown.

What is the total cost of carpeting the room if she needs to buy the carpet, the underlay and pay a carpet layer for installation.

Carpet - £62 per square metre

Underlay - £15 per square metre

Installation - £22 per square metre

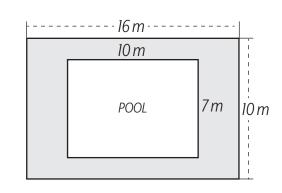


5) Sally wants to tile the area around her pool (shown by the area shaded grey).

How many square metres of tiles does Sally need?

What will it cost to buy the tiles at £27 per square metre?

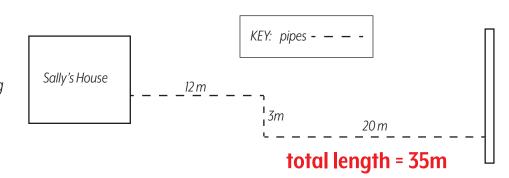
How much will Sally save on tiles during a 10% off sale?



Calculating Costs - Length and Area

- 1) What is the total cost of 20 metres of plastic piping at £15 per metre? £15 \times 20 = £300
- 2) Sally needs to replace the pipes that carry water from her house to the street as shown.

Calculate the total cost of replacing the pipes if Sally needs to purchase the pipes and hire a plumber to lay the pipes.



Cost to buy the pipes at £15 per metre £525 (£15 x 35m)

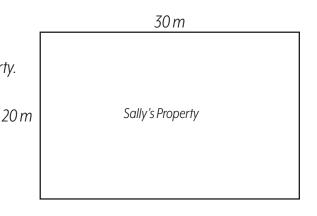
Plumbing installation costs - £12 per metre £420 (£12 x 35m)

total cost: <u>£945</u> (£525 + £420)

3) Sally wants to replace the fence that surrounds her entire property. What is the total cost for a fence that costs £32 per metre?

Sally needs 100m

 $£32 \times 100 = £3200$



4) Sally wants to lay carpet in the room shown.

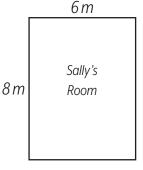
What is the total cost of carpeting the room if she needs to buy the carpet, the underlay and pay a carpet layer for installation.

Carpet - £62 per square metre Area = 48m²

Underlay - £15 per square metre **Total cost per square metre :**

Installation - £22 per square metre £62 + £15 + £22 = £99

Total cost : £99 x 48 = £4752



5) Sally wants to tile the area around her pool (shown by the area shaded grey).

How many square metres of tiles does Sally need? 90m²
What will it cost to buy the tiles at £27 per square metre? £2430

What will it cost to buy the tiles at £2/ per square metre? £2430 How much will Sally save on tiles during a 10% off sale? £243

To calculate the area to be tiled, calculate the entire area first - $16 \times 10 = 160 \text{m}^2$.

Then subtract the area of the pool. $160m^2 - 70 m^2 = 90m^2$

