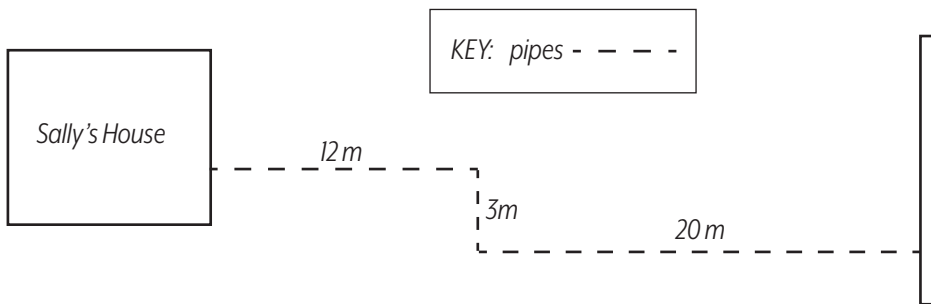Name:

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.
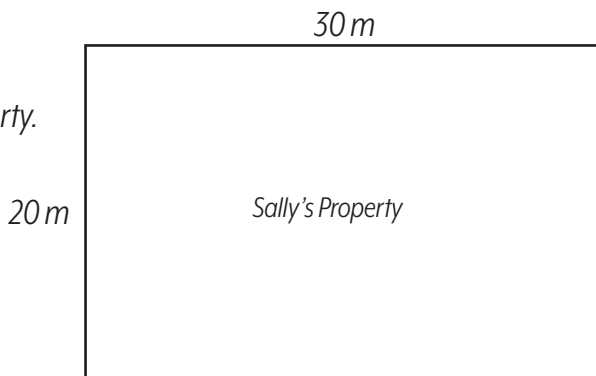
KEY: pipes - - - -

Sally's House

12 m

3m

20 m

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?
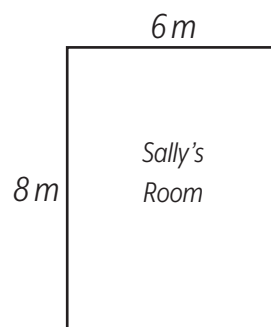
30 m

20 m

Sally's Property

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

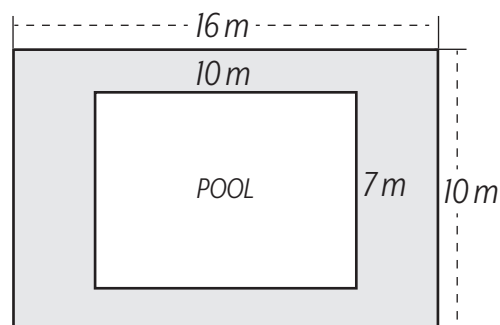Installation - $22 per square metre

6 m

8 m

Sally's Room

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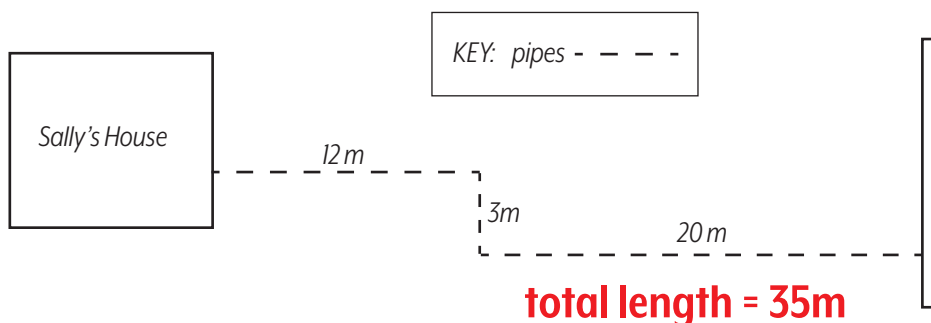How much will Sally save on tiles during a 10% off sale?

16 m

10 m

POOL

7 m

10 m

Calculating Costs - Length and Area

1) What is the total cost of 20 metres of plastic piping at $15 per metre? **$15 x 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.
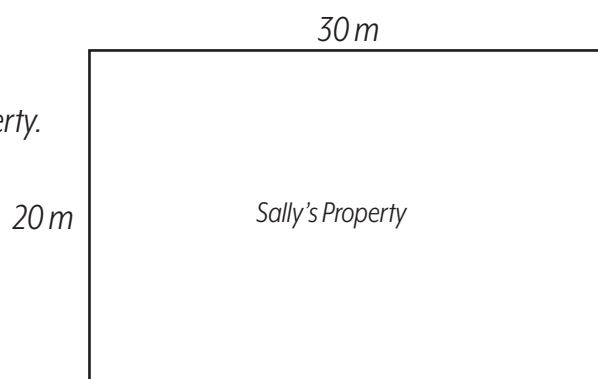
Sally's House

KEY: pipes - – - – -

12 m

3m

20 m

total length = 35m

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: **$945**   **($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?
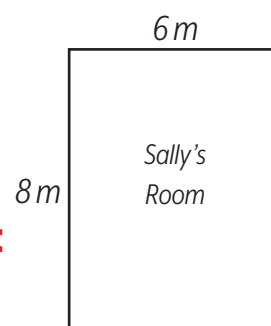
Sally needs 100m

$32 x 100 = $3200

30 m

20 m

Sally's Property

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

Area = 48m²

Total cost per square metre :

$62 + $15 + $22 = $99

Total cost : $99 x 48 = $4752

6 m

8 m

Sally's Room

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**

How much will Sally save on tiles during a 10% off sale? **$243**

16 m

10 m

POOL

7 m

10 m

To calculate the area to be tiled, calculate the entire area first - 16 x 10 = 160m².

Then subtract the area of the pool.   **160m² - 70 m² = 90m²**