Spring Fever

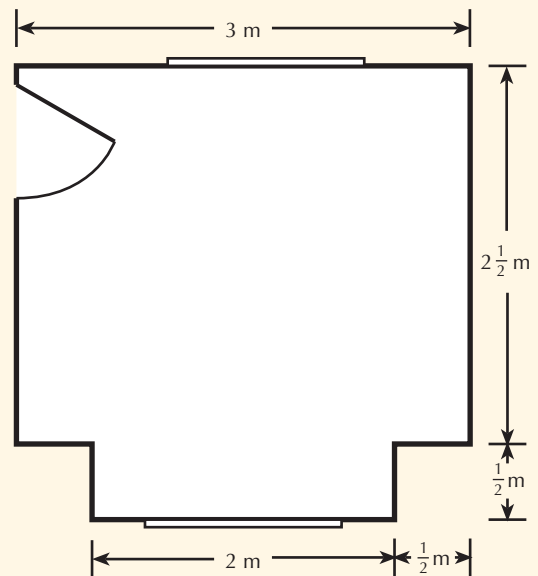**You need** ☑ a calculator (optional) ☑ a classmate

Activity

Rebecca is allowed to redecorate her bedroom. She needs to choose new wallpaper, curtains, and carpet and work out how much it will all cost.
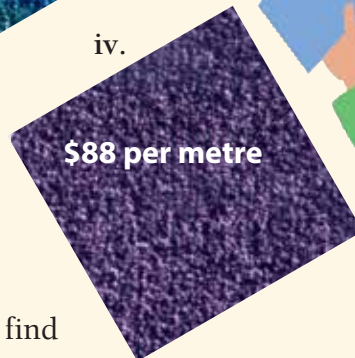
Here is the plan of the bedroom.
The walls are 2.4 metres high.
The windows are 1.3 metres by 1.3 metres.
The door is 0.75 metres wide.

Plan dimensions: 3 m across top; $2\frac{1}{2}$ m on right side; $\frac{1}{2}$ m; 2 m along bottom; $\frac{1}{2}$ m.

1. Carpet is sold in rolls that are 3.66 metres wide. Rebecca can choose one of these carpets to have in her room:

   i. $115 per metre

   ii. $98.50 per metre

   iii. $155 per metre

   iv. $88 per metre

   a. If she buys 3 metres of carpet, how much carpet will be wasted (in square metres)?

   b. Choose a carpet for Rebecca and find the cost for 3 metres of that carpet.

Solving multiplication and division problems using decimals

2. Rebecca has to work out how many rolls of patterned wallpaper she needs. She uses the information below for walls that are about 2.4 metres high:

	Distance around the room (excluding doors and windows)								
Metres	8.53	9.75	10.97	12.19	13.41	14.63	15.85	17.07	18.29
Rolls needed	6	7	7	8	9	10	10	11	12

a. Work out the distance around the room (the perimeter) excluding doors and windows.

b. How many rolls of wallpaper does Rebecca need?

c. Rebecca is allowed to spend $450 on her wallpaper. What is the most she could pay for a roll of wallpaper within her budget?

d. Choose one of the wallpapers below.
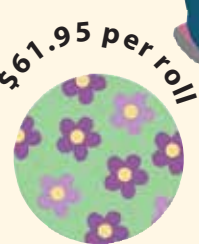How much will Rebecca pay for her wallpaper?

i. $30.80 per roll

ii. $58 per roll
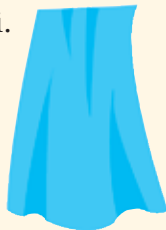
iii. $46.50 per roll

iv. $61.95 per roll

3. a. Choose one of the curtain materials below for Rebecca's room. The curtain material is 120 centimetres wide.

i. $39.50 per metre

ii. $20.75 per metre

iii. $18.75 per metre

iv. $25.99 per metre

Each window will have 2 curtains that are each 120 centimetres wide. (The width of the curtain material allows for gathers.) Each curtain should also have enough material to allow for a 10 centimetre hem at the bottom and a 5 centimetre hem at the top. How much material would Rebecca need to order?

b. How much would the curtain material cost?

4. Find the total cost of the carpet, wallpaper, and curtain material you have chosen for Rebecca.