

a) Jamie buys fence panels that fit tightly together.

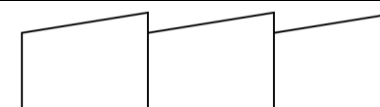


Each panel has a length of 1.8m, correct to 1 decimal place.  
Jamie measures the length of a garden as 42m, correct to the nearest metre.

Work out the minimum number of panels Jamie should buy in order to be certain that there are enough panels for the length of the garden.  
Show how you decide?

How wide is the fence panel, $w$ ?	$1.75\text{m} \leq w < 1.85\text{m}$
How long is the garden, $l$ ?	$41.5\text{m} \leq w < 42.5\text{m}$
To be sure of having enough, what assumptions can Jamie make?	The garden <i>could</i> be 42.5m long – this would require more fence panels. The width of each panel <i>could</i> be 1.75m wide – this would require more fence panels.
Taking these assumptions into account, how many fence panels does Jamie need to buy?	$42.5 \div 1.75 = 24.\overline{285714}$ Jamie needs to buy a minimum of 25 fence panels to be sure that they will have enough fencing for the length of the garden.

b) Jamie buys fence panels that fit tightly together.

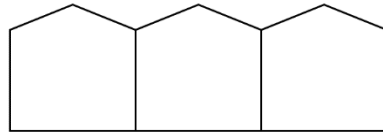


Each panel has a length of 1.6m, correct to 1 decimal place.  
Jamie measures the length of a garden as 48m, correct to the nearest metre.

Work out the minimum number of panels Jamie should buy in order to be certain that there are enough panels for the length of the garden.  
Show how you decide?

How wide is the fence panel, $w$ ?	$1.55\text{m} \leq w < 1.65\text{m}$
How long is the garden, $l$ ?	$47.5\text{m} \leq w < 48.5\text{m}$
To be sure of having enough, what assumptions can Jamie make?	The garden <i>could</i> be 48.5m long – this would require more fence panels. The width of each panel <i>could</i> be 1.55m wide – this would require more fence panels.
Taking these assumptions into account, how many fence panels does Jamie need to buy?	

c) Jamie buys fence panels that fit tightly together.



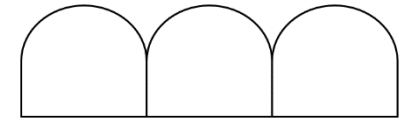
Each panel has a length of 2.4m, correct to 1 decimal place.

Jamie measures the length of a garden as 30m, correct to the nearest metre.

Work out the minimum number of panels Jamie should buy in order to be certain that there are enough panels for the length of the garden. Show how you decide?

How wide is the fence panel, $w$ ?	$2.35\text{m} \leq w < 2.45\text{m}$
How long is the garden, $l$ ?	$29.5\text{m} \leq w < 30.5\text{m}$
To be sure of having enough, what assumptions can Jamie make?	
Taking these assumptions into account, how many fence panels does Jamie need to buy?	

d) Jamie buys fence panels that fit tightly together.



Each panel has a length of 1.5m, correct to 1 decimal place.

Jamie measures the length of a garden as 20m, correct to the nearest metre.

Work out the minimum number of panels Jamie should buy in order to be certain that there are enough panels for the length of the garden. Show how you decide?