

## Year 3 – WC 08.06.20 – Catshill Home Learning

Hello Year 3,

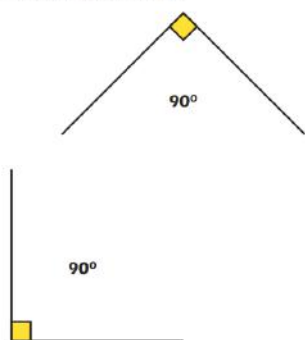
We hope you enjoyed learning about turns and angles last week. This week, we are going to look at other types of angles as well as different types of lines. Here are some suggested activities to try. If you can't print the sheet or watch the videos, don't worry, just look the worksheets on the screen and write your answers on a piece of paper.

1.) Watch the video to see Emma explain what acute and obtuse angles are.

[https://www.youtube.com/watch?v=S\\_pOSTXaf9s](https://www.youtube.com/watch?v=S_pOSTXaf9s) then complete worksheet 1.

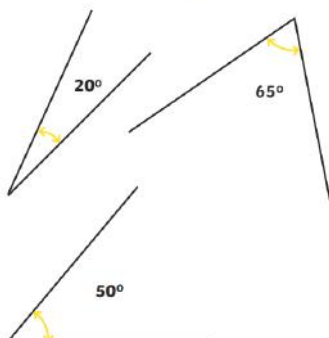
A right angle is  $90^\circ$ .

These are some examples of right angles.



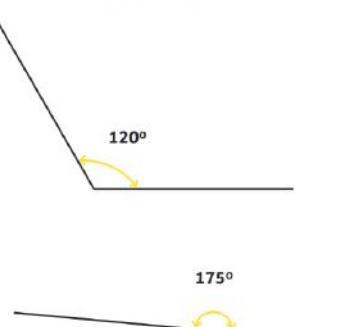
An acute angle is less than  $90^\circ$ .

These are some examples of acute angles.

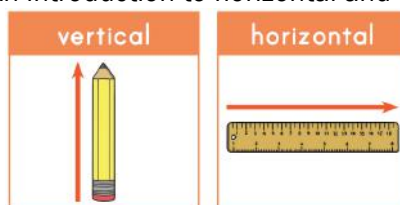


An obtuse angle is greater than  $90^\circ$  and less than  $180^\circ$ .

These are some examples of obtuse angles.

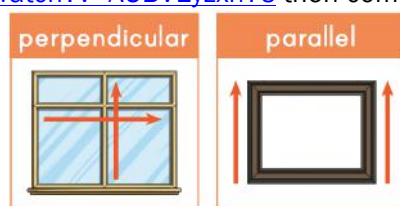


2.) Complete worksheet 2. An introduction to horizontal and vertical lines.



3.) Watch the video to learn about parallel and perpendicular lines

<https://www.youtube.com/watch?v=AUBVEyzxn7s> then complete worksheet 3.



4.) Show off what you know so far about turns, angles and lines by answering the **true or false** statements.

5.) Family Friday challenge! Remember to show any working out.

### Other website links

<https://www.bbc.co.uk/bitesize/subjects/z826n39>

<https://trockstars.com/>

We miss you all. Take care and stay safe!

Miss Moody and Mrs Braiden-Smith ☺

# Compare angles

1 Here are some angles.

a) Circle the angle that is greater than a right angle.



b) Circle the angle that is less than 90 degrees.



2 Draw three different angles that are less than a right angle.

Compare answers with a partner.

Complete the sentence.

These are all examples of \_\_\_\_\_ angles.



3 Draw two different obtuse angles.

Compare answers with a partner.

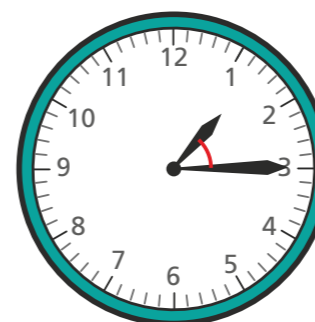
Complete the sentence.

Obtuse angles are greater than  degrees

but less than  degrees.

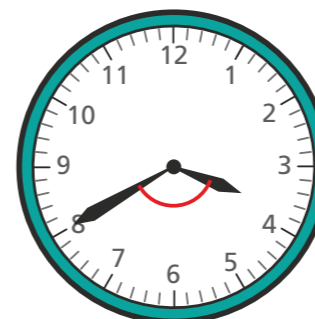
4 Is the angle between the hands of the clock acute or obtuse?

a)



\_\_\_\_\_

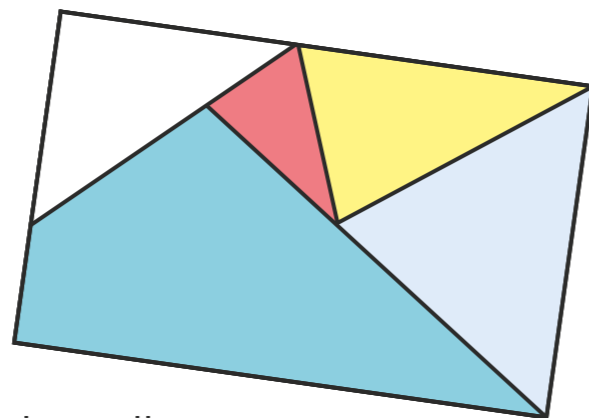
b)



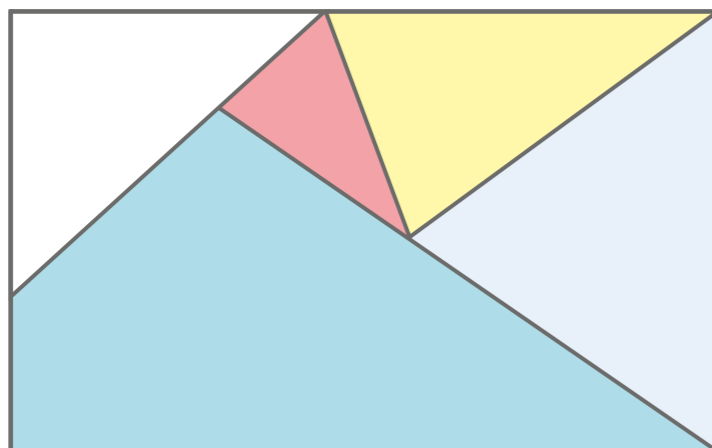
\_\_\_\_\_



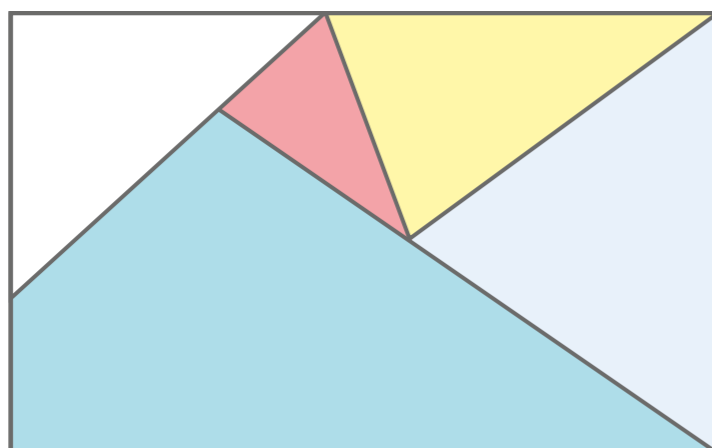
- 5 Here is a piece of wallpaper.



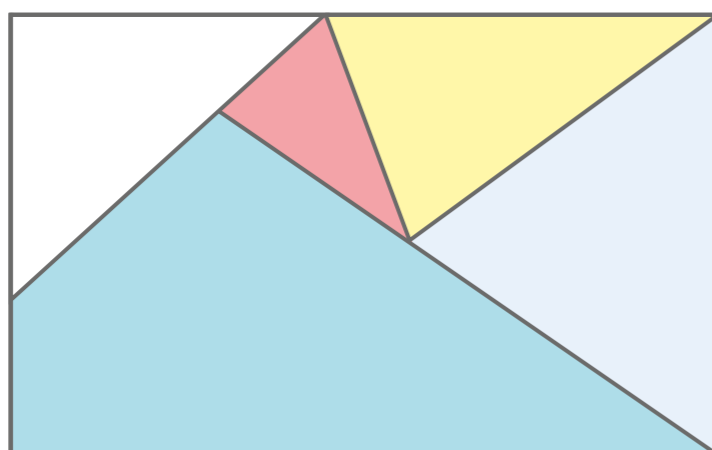
- a) Mark two right angles on the wallpaper.



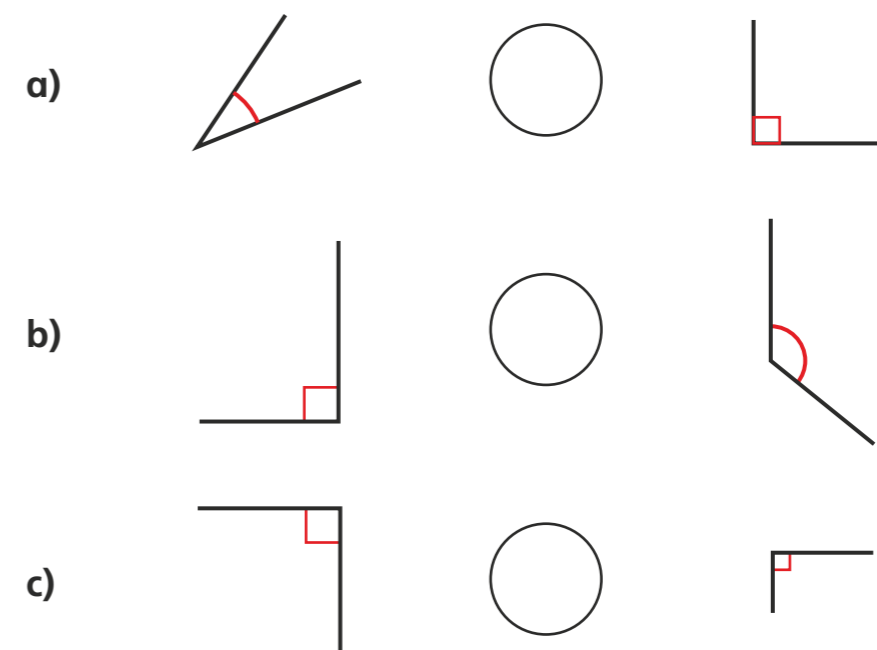
- b) Mark four acute angles on the wallpaper.



- c) Mark two obtuse angles on the wallpaper.



- 6 Write  $<$ ,  $>$  or  $=$  to compare the sizes of the angles.



- 7 Draw a shape that has one right angle, two acute angles and one obtuse angle.



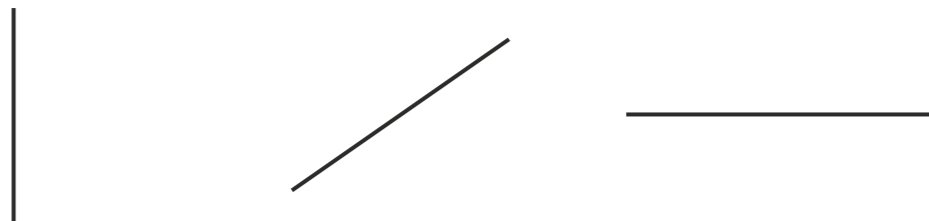
Compare answers with a partner.

What is the same and what is different about your shapes?

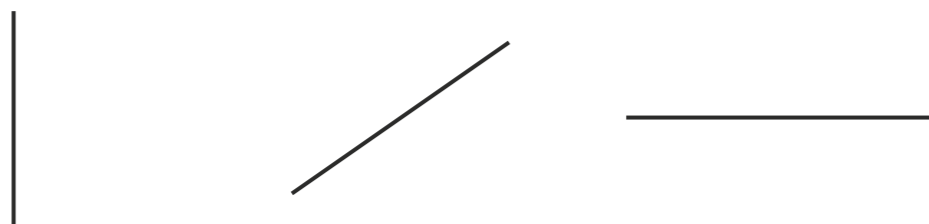


# Horizontal and vertical

- 1 Circle the line that is horizontal.



- 2 Circle the line that is vertical.



- 3 Use a ruler to draw the lines.

- a) Draw a horizontal line 5 cm long.



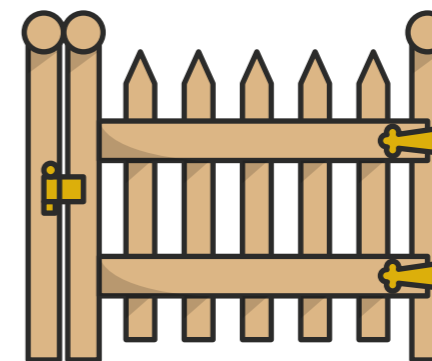
- b) Draw a line that is not horizontal or vertical.



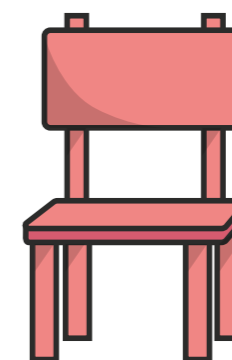
- c) Draw a vertical line 5 cm long.



- 4 Tick two horizontal lines on the gate.



- 5 Tick three vertical lines on the chair.



6 Here are some flags.

a) Circle the flags that have horizontal stripes.



b) Circle the flags that have vertical stripes.



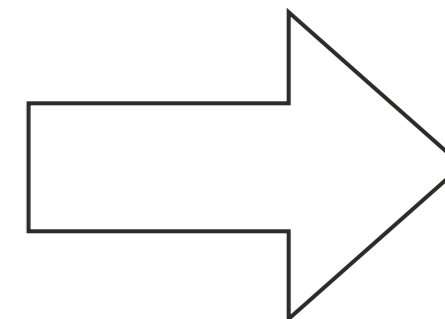
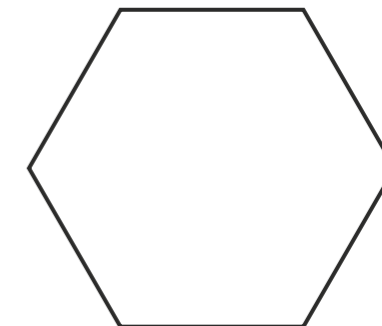
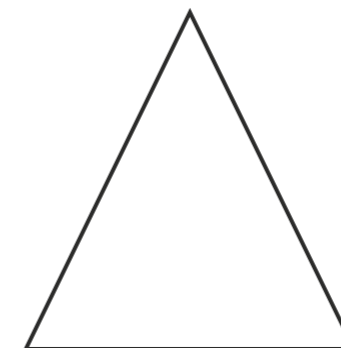
c) Is the statement true or false?

This flag has vertical and horizontal stripes.



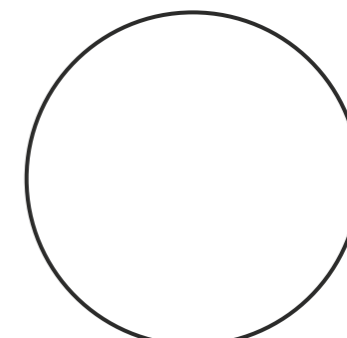
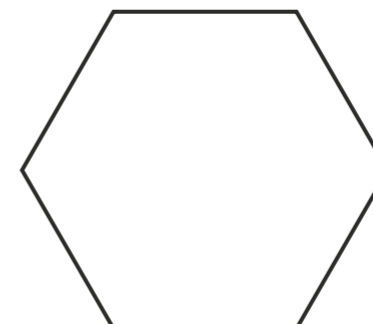
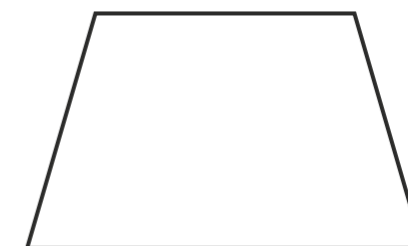
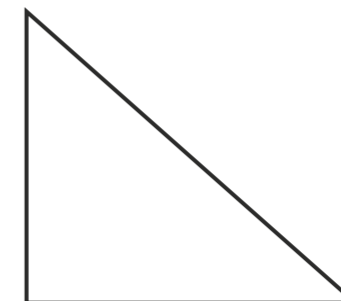
7 Tick the shapes that have a vertical line of symmetry.

Draw on the shapes to show the line of symmetry.



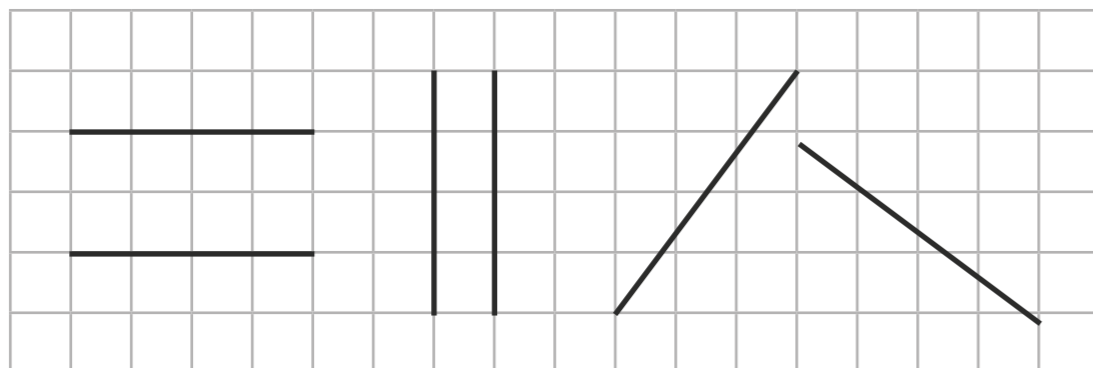
8 Tick the shapes that have a horizontal line of symmetry.

Draw on the shapes to show the line of symmetry.



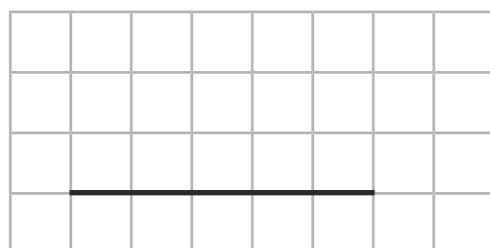
# Parallel and perpendicular

- 1 Tick the pairs of lines that are not parallel.

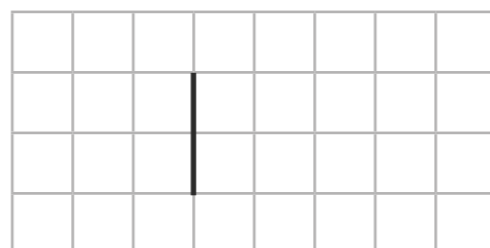


- 2 Here are two lines.  
Draw a line that is parallel to each.

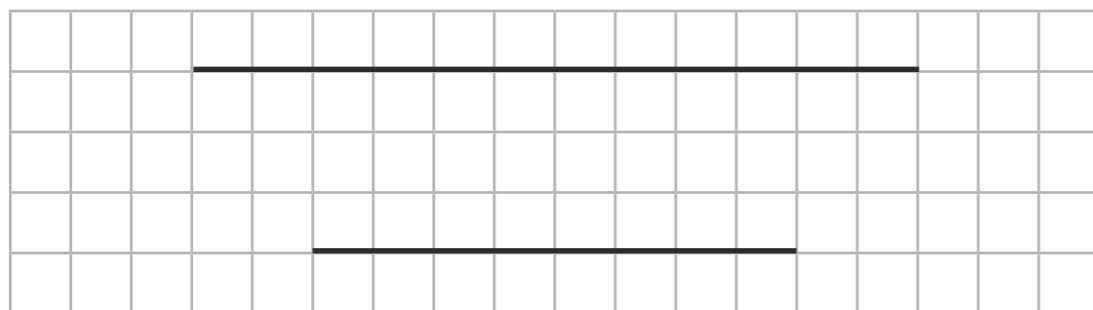
a)



b)



- 3 Amir says that the lines are not parallel because they are different lengths.



Is Amir correct? \_\_\_\_\_

Why?



- 4 a) Here is a line. Draw a line that is **not** parallel to it.

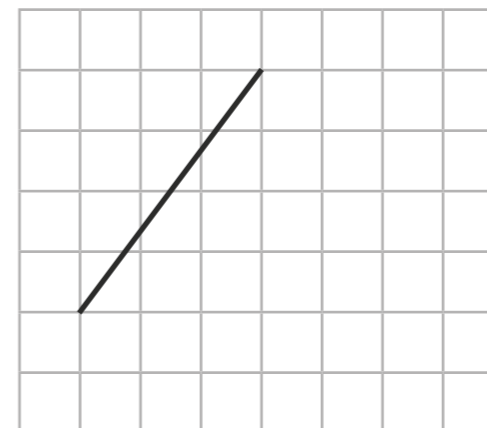


- b) Here is a line. Draw a line that is parallel to it.

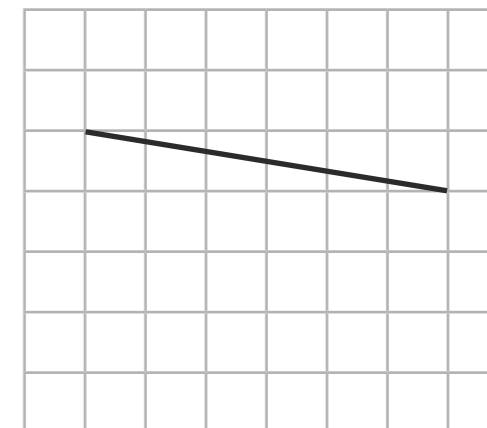


- 5 Here are two lines.  
Draw a line that is parallel to each.

a)



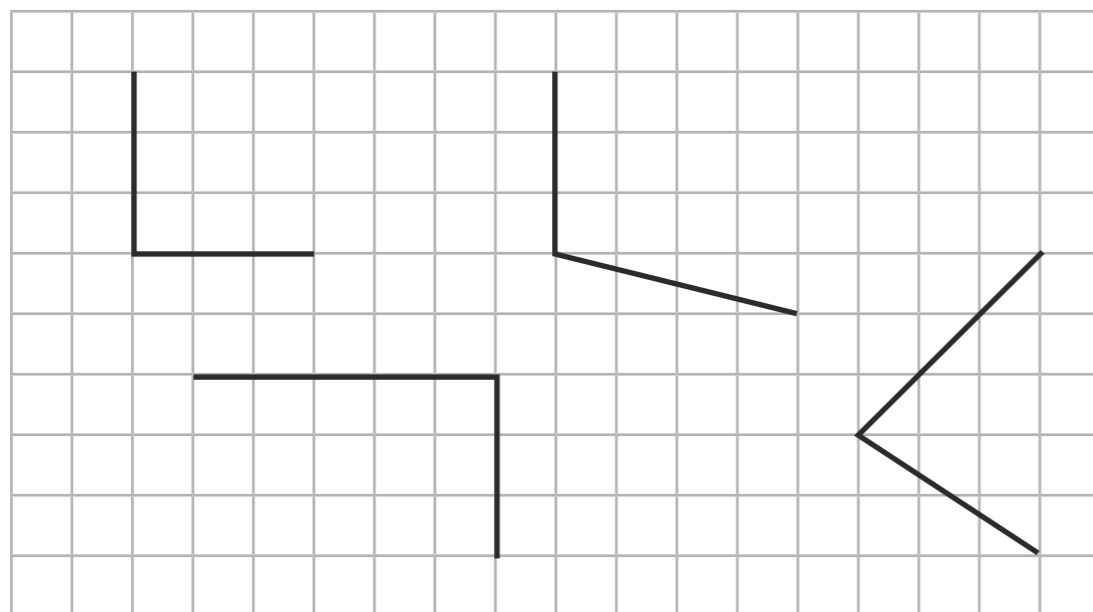
b)



Talk to a partner about how you did it.

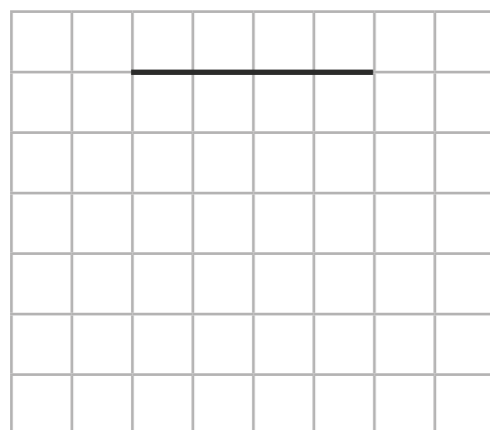


- 6 Tick the perpendicular lines.

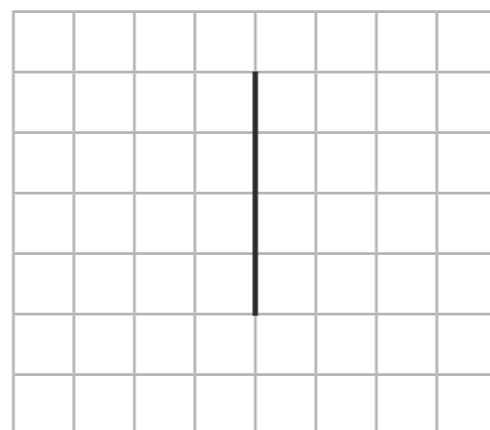


- 7 Here are two lines. Draw a line that is perpendicular to each.

a)

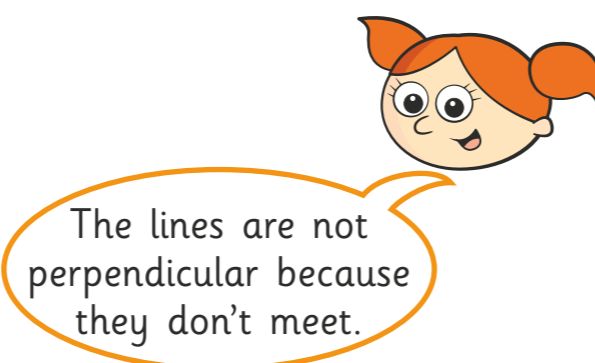
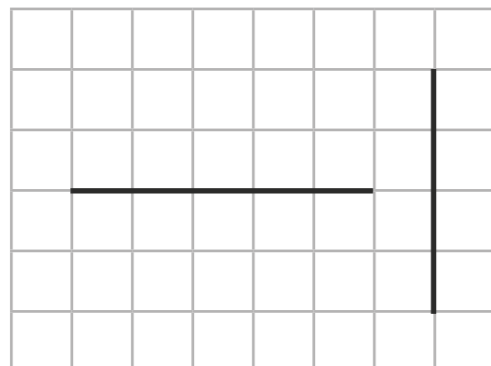


b)



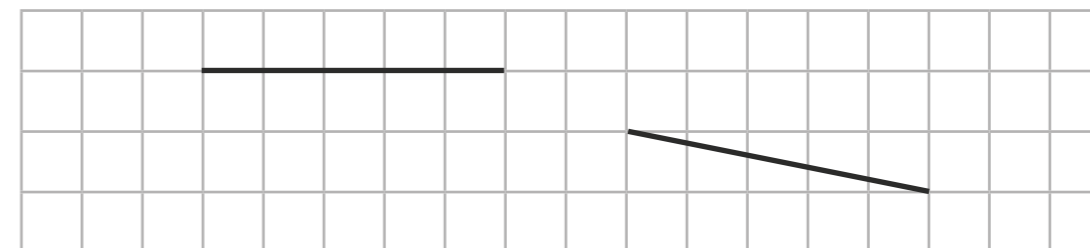
- 8 Alex has drawn some lines on grids.

a)



Do you agree with Alex? \_\_\_\_\_

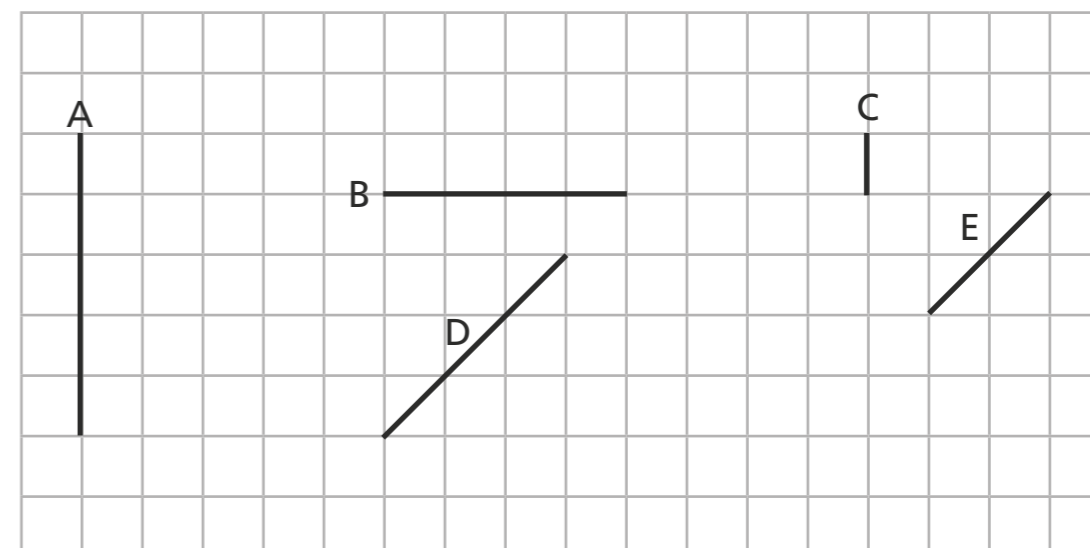
b)



Do you agree with Alex? \_\_\_\_\_

Talk about your answers with a partner.

- 9 Five lines are drawn on the grid.



a) Which two pairs of lines are parallel?

\_\_\_\_\_

b) Which two pairs of lines are perpendicular?

\_\_\_\_\_

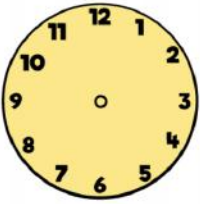
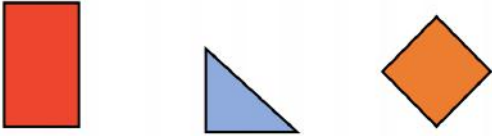



Answer the true or false statements.

**True because...**

**False because...**

Remember to prove your answer with a clear explanation or examples.

True or False? Turns and angles	True or False? Right angles in shapes
<p>A quarter turn clockwise = 15 minutes later</p> 	<p>All of these shapes have right angles.</p> 
<p>Acute means "less than a right angle".</p>	<p>There are letters other than E, H and T that have only horizontal and vertical lines.</p>
<p>True or False? Parallel and perpendicular</p> <p>This shape has perpendicular lines.</p> 	

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## Challenge 1

Jane is standing in a queue.

There are 5 people in front of her.

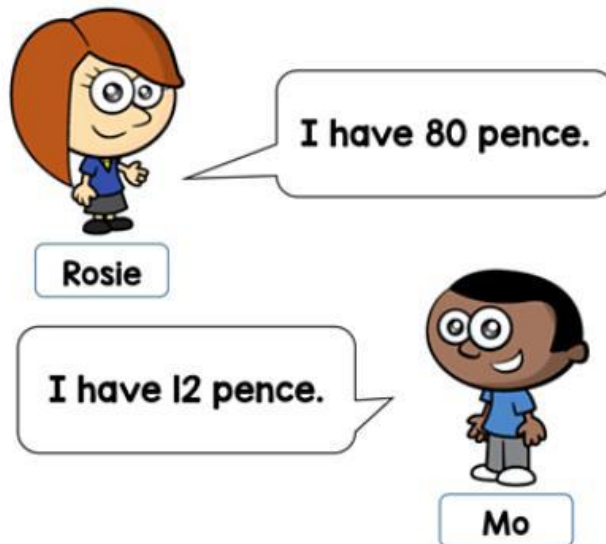
There are 2 people behind her.

How many people are in the queue?

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## Challenge 2



Rosie gives Mo 25 pence.

How much more money does Rosie have than Mo now?

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### Challenge 3

If

$$70 + \text{yellow circle} = 100$$

$$50 + \text{green triangle} = 100$$

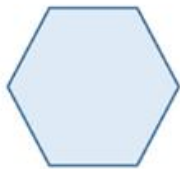
$$\text{yellow circle} + \text{green triangle} + \text{blue square} = 100$$

What is the value of the blue square?

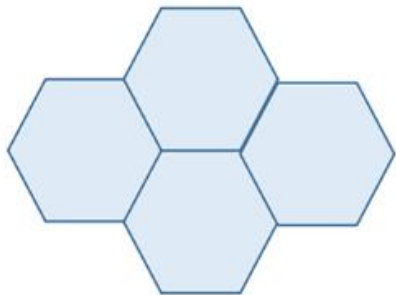
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### Challenge 4

The perimeter of this regular hexagon is 42 cm.



Four of these hexagons are put together to make this shape.



What is the perimeter of the shape?