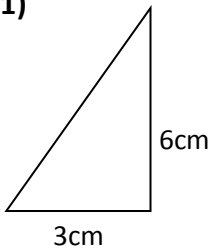


Gradient

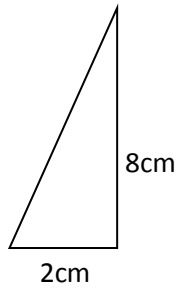
Exercise 1

Find the gradient of the sloping line the right angled triangles below.

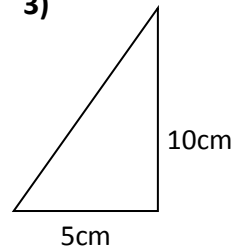
1)



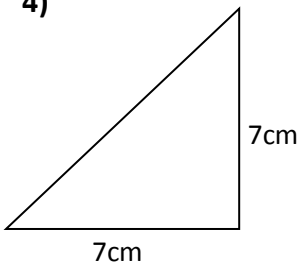
2)



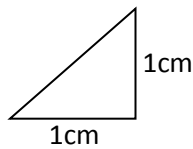
3)



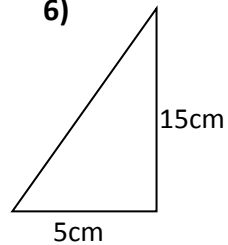
4)



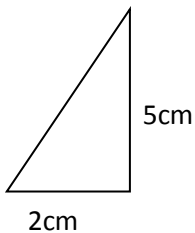
5)



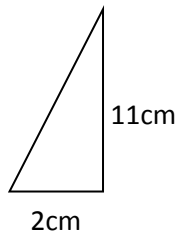
6)



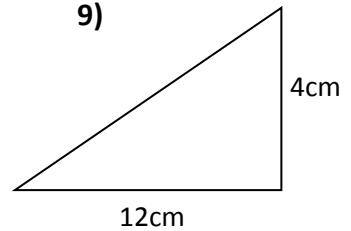
7)



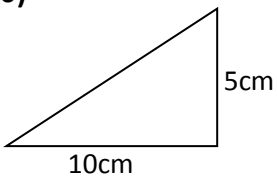
8)



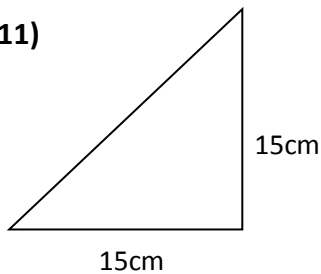
9)



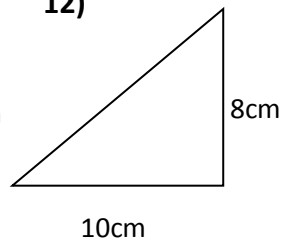
10)



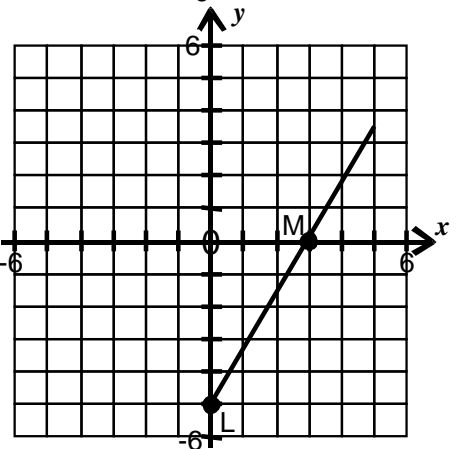
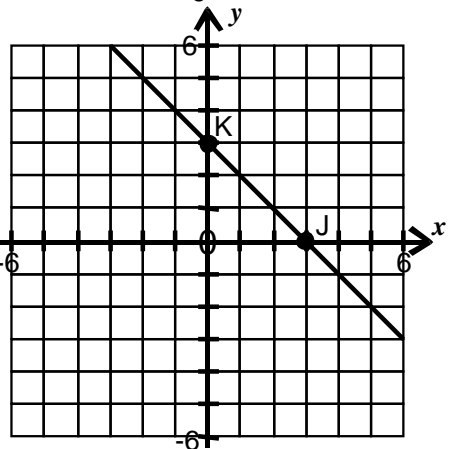
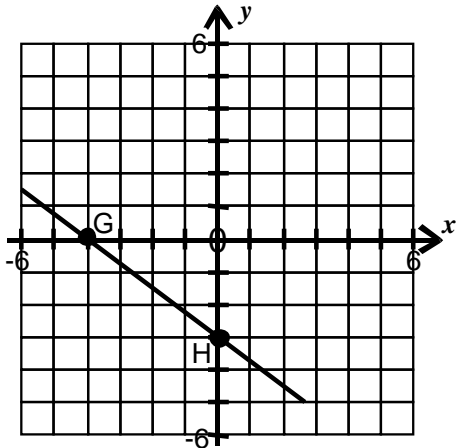
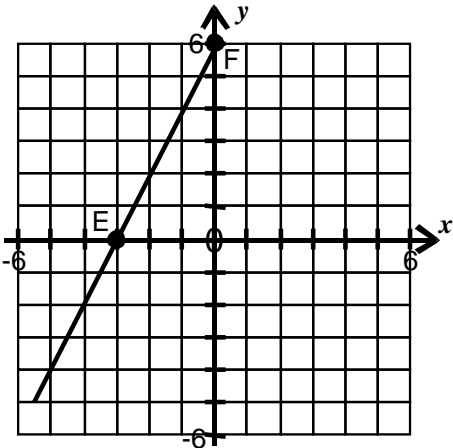
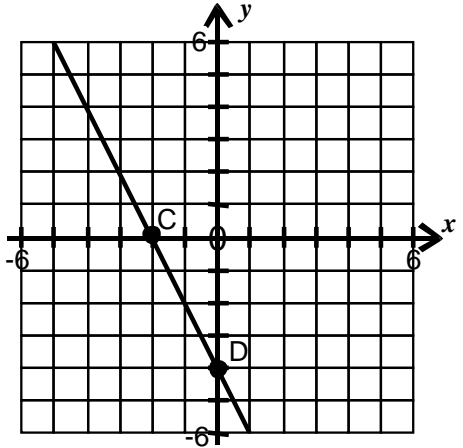
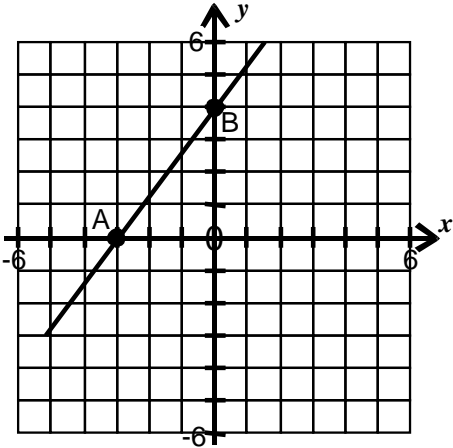
11)



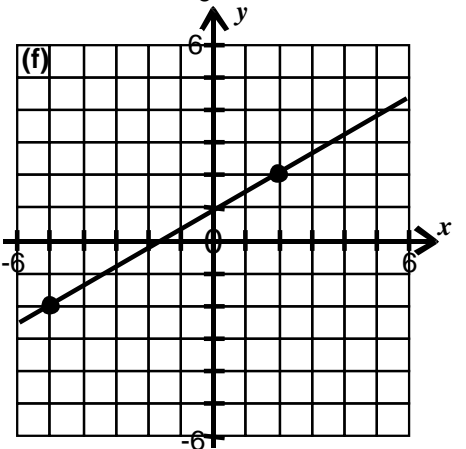
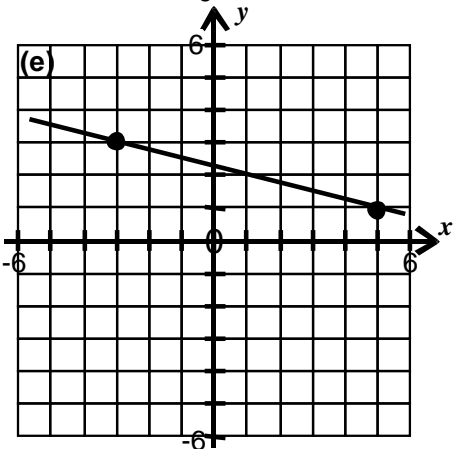
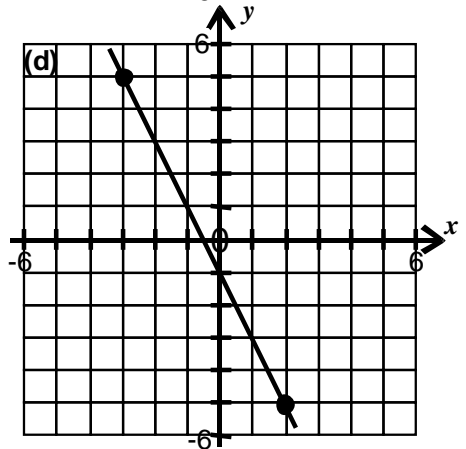
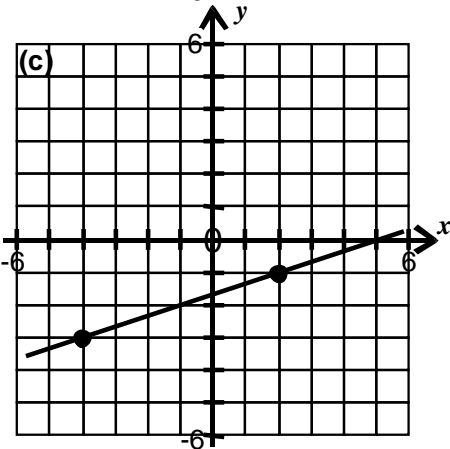
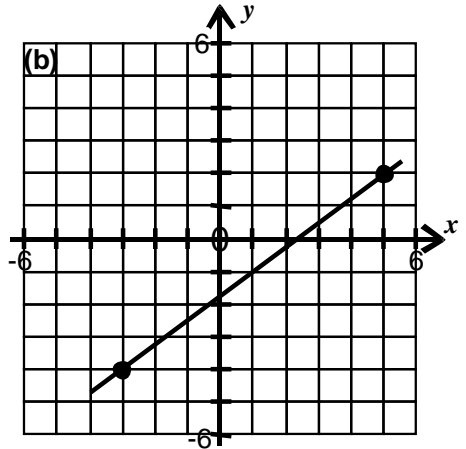
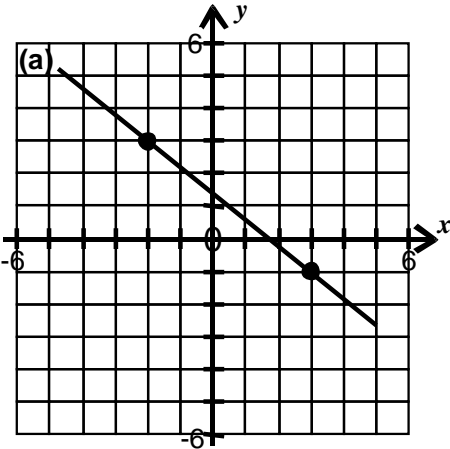
12)



Exercise 2 – Name each line then calculate its gradient.

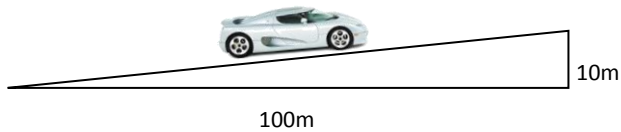


3) Work out the gradient of each line.

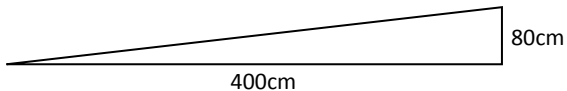


Exercise 2

- 1) A car is driving along the road shown in the diagram. Calculate the gradient of the hill on the road.



- 2) Brian needs to fit a wheelchair ramp at his house to allow his Gran access to the house. For safety reasons the gradient cannot be greater than 0.3. The dimensions of the ramp are shown in the diagram.



- a) Calculate the gradient of the ramp.
- b) Does the ramp meet the safety requirements?
- 3) To be eligible for hosting the Winter Olympics a ski slope must have a gradient of at least -1.6 ;
- Larkhall has a slope in Strutherhill which is shown in the diagram below. Is Larkhall eligible to host the next Winter Olympics? All working must be shown.

