

**16th September**

Corbettmaths

Solve

$$y^2 \leq 9$$

A curve has gradient function

$$\frac{dy}{dx} = 4x^2 - 3x - 7$$

Work out the gradient of the curve when  
 $x = -1$ The curve  $y = x^2 - 8x + 11$  and the  
line  $y = 21$  intersect at the points A and  
B.

Find the coordinates of A and B.

Two ships, A and B, leave a port at  
midday.Ship A travelled on a bearing of  $095^\circ$  at  
a speed of 30km/hShip B travelled on a bearing of  $150^\circ$  at  
a speed of 44km/hHow far apart are ships A and B at  
15:00?