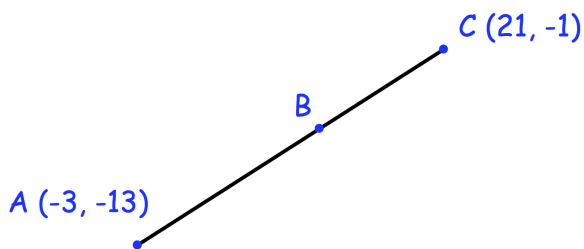




James is creating a password.  
He used 2 lowercase letters then 5 digits.  
He does not repeat any letter or digit.  
How many possible codes can James create?

$$\sqrt{45} + x\sqrt{20} = 7\sqrt{5}$$

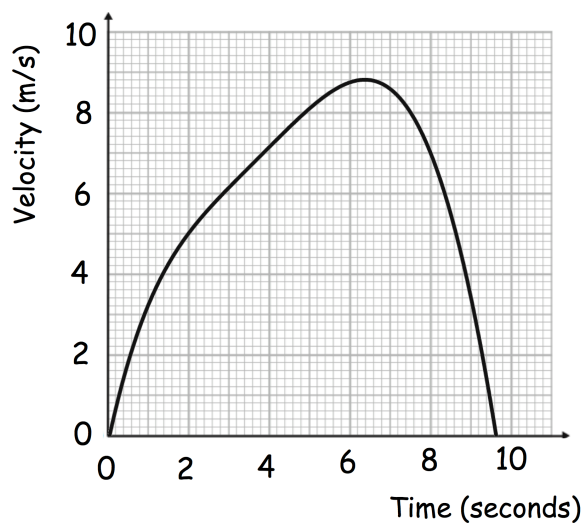
Find x



ABC is a straight line.  
AB is 40% longer than BC.

Work out the coordinates of B.

Here is a velocity-time graph for a journey.



Calculate an estimate of the acceleration at 2 seconds.

Calculate an estimate of the average acceleration between 7 and 8 seconds.