

## Quiz 4

74. part a) The tangent line passes the points with approximate coordinates  $(1,0)$  and  $(3,15)$ . Using the slope formula this means  $P'(3) \approx \frac{15-0}{3-1} = 7.5$

part b)  $P'(x)=0$  means to look at the  $x$ -coordinates of any point on the graph that has a horizontal tangent line. This happens at approximately  $x=1.7$  and  $x=4.1$

part c) Draw a line with slope 5 by using the idea of "rise over run" and the grid on the picture to find the points where the tangent line is parallel to it. This happens at approximately  $x=2.2$  AND  $x=3.6$ . Either answer is acceptable.

75.  $J'(x)$  is 0 at  $x=0$ . The maximum slope value on the graph is about 1.5 which occurs at about  $1.3=x$ . Similarly the minimum slope value on the graph is about  $-1.5$  which occurs at about  $x=-1.3$ . The sketch of the graph of  $y=J'(x)$  is given below.

