

# Topic Test 1 Mark Scheme

## Gradients and rates of change - Higher

Q	Answer	Mark	Comments
1	Tickets sold per minute	B1	
2(a)	30	B1	
2(b)	Hourly rate charged	B1	oe
3(a)	$\frac{2}{25}$	B1	
3(b)	14%	B1	
3(c)	$\frac{80}{x} = \frac{35}{100}$	M1	
	[225, 230]	A1	
4(a)	Between 1 and $1\frac{1}{2}$ hours	B1	
4(b)	$\frac{60}{2.5}$	M1	oe
	24	A1	
5(a)	$24 \div 5$	M1	oe
	4.8	A1	
5(b)	Tangent drawn at $x = 7.5$	M1	
	Vertical distance $\div$ horizontal distance for their tangent	M1dep	
	[0.55, 1.25]		

Q	Answer	Mark	Comments
6(a)	Tangent drawn and vertical distance and horizontal distances measured	M1	
	[0.4, 0.7]	A1	
6(b)	[2.7, 2.9]	B1	
6(c)	D	B1	
6(d)	$m/s^2$	B1	Accept acceleration