Direct and Inverse Proportion Topic Test 4 (20 minutes)
Mark Scheme

Q	Answer	Mark	Comments
1	$c \propto \frac{1}{d}$ or $d \propto \frac{1}{c}$ or $c = \frac{k}{d}$ or $c = k \times \frac{1}{d}$ oe	M1	
	$k = 8$	A1	
	$c = \frac{8}{2}$ $(c =)4$	A1	

Q	Answer	Mark	Comments
2	$time \propto \frac{1}{speed}$ or $time = \frac{k}{speed}$	M1	Accept any algebraic substitute
	$40 = \frac{k}{20}$ or $k = 800$	M1	
	32	A1	
	08:32	A1	

Q	Answer	Mark	Comments
3(a)	B and F	B1	
	A and E	B1	

Q	Answer	Mark	Comments
4(a)	$m \propto n$ or $n \propto m$ or $m = k \times n$ or $n = k \times m$	M1	
	$4.5 = k \times 3$ or $k = 1.5$	M1	
	$m = 1.5 \times n$	A1	
4(b)	$m = 1.5 \times 5$ $(m =)7.5$	A1	
4(c)	$3 = 1.5 \times n$ $(n =)2$	A1	

Q	Answer	Mark	Comments
5(a)	Point (6, 12) plotted correctly	M1	
	Straight line from (0, 0) to (6, 12)	A1	
5(b)	$(x =)$ 20	B1ft	ft their line $\pm \frac{1}{2}$ square