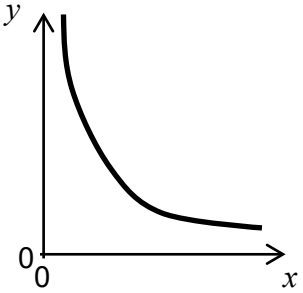


# Topic Test 1 Mark Scheme

## Direct and Inverse proportion - Higher

Q	Answer	Mark	Comments
1	C, A, B	B2	B1 if 1 correct
2	Stays the same	B1	
3	B	B1	
4	$k = 8$	M1	
	2	A1	
5	$2400 = 480k$ or $k = 5$	M1	oe
	$550 \div$ their $k$ or 110	M1dep	
	9.01 and 50 seconds	A1	
6	$200 = k \times 10^3$	M1	
	$k = \frac{1}{5}$	A1	oe
	675	A1	
7(a)	$12 = k \times 2^3$	M1	
	$k = 1.5$	A1	
	96	A1	
7(b)	2.77	B1	

Q	Answer	Mark	Comments
8		B1	
9	$T_1 = \frac{D}{S_1} \text{ or } T_1 S_1 = D$	M1	oe
	$(T_2) = \frac{T_1 S_1}{1.4 S_1}$	M1dep	
	$(T_2) = \frac{5}{7} T_1$	A1	