

## Direct and Inverse Proportion Topic Test 3 (20 minutes)

### Mark Scheme

Q	Answer	Mark	Comments
1	$g \propto h$ or $h \propto g$ or $g = k \times h$ or $h = k \times g$	M1	
	$k = 9$	A1	
	$g = 9 \times 9$ ( $g =$ )81	A1	
2(a)	$b \propto \frac{1}{a}$ or $b = \frac{k}{a}$ or $b = k \times \frac{1}{a}$	M1	
	$2.5 = \frac{k}{8}$ or $k = 20$	M1	
	$b = \frac{20}{a}$	A1	
2(b)	$b = \frac{20}{10}$ ( $b =$ ) 2	A1	
3(a)	Point (2, 8) plotted correctly	M1	
	Straight line through (0, 0) and (2, 8)	A1	
3(b)	( $y =$ ) 24	B1ft	ft their line $\pm \frac{1}{2}$ square
4(a)	$d \propto p$ or $p \propto d$ or $d = k \times p$ or $p = k \times d$	M1	
	$150 = k \times 5$ or $k = 30$	M1	
	$d = 30 \times p$	A1	
4(b)	$120 = 30 \times p$ 4 litres	A1	
5	10	B1	allow $\pm \frac{1}{2}$ square