Question	Working	Answer	Mark	Notes
20	angle $CDB = x$ or angle $CAB = x$ angle $CBA = 180 - 2x$ angle $CDA = 180 - (180 - 2x) = 2x$			M1 M1 M1
		proof with reasons	5	B1 dep on M1 for any one appropriate circle theorem reason A1 for complete proof with full reasons alternate segment theorem, angles in a triangle sum to 180^o, isosceles triangle, opposite angles of a cyclic quadrilateral sum to 180^o
	Alternative method angle $CDB = x$ or angle $CAB = x$ angle $ACB = x$ angle $ACQ = 2x$ and angle $CDA = 2x$			M1 M1 M1
		proof with reasons	5	B1 dep on M1 for any one appropriate circle theorem reason A1 for complete proof with full reasons alternate segment theorem, isosceles triangle
	Alternative method angle $OCB = 90 - x$ angle $BOC = 180 - 2(90 - x)$ $(=2x)$ angle $AOB = 2x$ and angle $CDA = 2x$			M1 M1 M1
		proof with reasons	5	B1 dep for any one appropriate circle theorem reason A1 for complete proof with full reasons angle between tangent and radius is 90^o oe, angles in a triangle sum to 180^o, isosceles triangle, angle at centre is twice angle at circumference oe

Q20 contd	Alternative method where students assume $CDA = 2x$ and must work to show that $BCQ = x$			
	eg angle ABC = $180 - 2x$ Angle CAB = angle ACB = $[180 - (180 - 2x)] \div 2 = x$ $BCQ = CAB = x$			M1 M1 M1 B1 Dep on M1 for any one appropriate circle theorem reason A1 For complete proof with reasons e.g. opposite angles of cyclic quadrilateral sum to 180° angles in triangle sum to 180° isosceles triangle alternate segment theorem
21	$y = \frac{6}{4}x(+33)$ **or** (gradient =) $\frac{6}{4}$ oe $m \times \frac{6}{4} = -1$ **or** (gradient of **M** =) $-\frac{2}{3}$ oe $\frac{k-6}{-4-5} = "-\frac{2}{3}"$	12	4	M1 M1 M1 or complete method to find equation of line ($3y = -2x + 28$) dep and then substitution of $x = -4$ A1