3	$12.8^2 + x^2 = 16^2$ oe or $163.84 + x^2 = 256$ or $(x^2 =) 16^2 - 12.8^2$ $(= 92.16)$ or $(x^2 =) 256 - 163.84$ $(= 92.16)$		4	M1 for applying Pythagoras theorem correctly Allow $\cos^{-1}\left(\frac{12.8}{16}\right)(= 36.9...)$ **and** $\frac{x}{\sin(36.9...)} = \frac{16}{(\sin 90)}$
	$(x =) \sqrt{16^2 - 12.8^2}$ $(= \sqrt{92.16})$ $(= 9.6)$ or $(x =) \sqrt{256 - 163.84}$ $(= \sqrt{92.16})$ $(= 9.6)$			M1 for square rooting Allow $x = \frac{16}{(\sin 90)} \times \sin(36.9...)$
	(12.8 – "9.6") + "9.6" + "9.6" + 16 + 16 + 16 oe			M1 (dep on M1) for a complete method to find the perimeter
		70.4		A1 oe e.g. $\frac{352}{5}$
				Total 4 marks

4	(a)		15, 0, −1, 3	2	B2 for 4 correct values (B1 for 2 or 3 correct values)
	(b)	(−2, 15) (−1, 8) (0, 3) (2, −1) (3, 0) (4, 3)		2	M1 (dep on B1) ft from (a) for at least 5 points plotted correctly
			correct graph		A1 for a correct graph (clear intention to go through all the points and which must be curved at the bottom) **Note**: If a fully correct graph is shown, but an incomplete table is shown in (a), then award the marks for (a)
					Total 4 marks