International GCSE Maths				
Values in quotation marks must come from a correct method previously seen unless clearly stated otherwise.				
Q	**Working**	**Answer**	**Mark**	**Notes**
1	$(x^2 =)48^2 + 20^2 (= 2704)$ oe or $\tan^{-1}\left(\frac{20}{48}\right)(= 22.6(198...))$ **and** $\cos"22.6" = \frac{48}{x}$ oe or $\tan^{-1}\left(\frac{48}{20}\right)(= 67.3(801...))$ **and** $\sin"67.3" = \frac{48}{x}$ oe or $\tan^{-1}\left(\frac{20}{48}\right)(= 22.6(198...))$ **and** $\frac{x}{\sin 90} = \frac{20}{\sin"22.6"}$ oe or $\tan^{-1}\left(\frac{48}{20}\right)(= 67.3(801...))$ **and** $\frac{x}{\sin 90} = \frac{48}{\sin"67.3"}$ oe or $(x^2 =)48^2 + 20^2 - (2 \times 48 \times 20 \times \cos 90)(= 2704)$ oe		3	M1 Allow the use of different trigonometrical techniques to find 52
	$(x =)\sqrt{48^2 + 20^2}\left(= \sqrt{2704}\right)$ oe or $(x =)\frac{48}{\cos"22.6"}$ oe or $(x =)\frac{48}{\sin"67.3"}$ oe or $(x =)\frac{20}{\sin"22.6"}(\times \sin 90)$ oe or $(x =)\frac{48}{\sin"67.3"}(\times \sin 90)$ oe or $(x =)\sqrt{2304 + 400}\left(= \sqrt{2704}\right)$			M1
	Correct answer scores full marks (unless from obvious incorrect working)	52		A1 cao
				Total 3 marks

1 **ALT**	$\left(x^2 =\right)\sqrt{5^2+12^2}\left(=\sqrt{169}=13\right)$ oe		3	M1 for recognising a Pythagorean triple
	$\left(x =\right)"13"\times\frac{20}{5}$ oe or $\left(x =\right)"13"\times\frac{48}{12}$ oe			M1
	Correct answer scores full marks (unless from obvious incorrect working)	52		A1 cao
				Total 3 marks