

1		32.3	<p>P1 for using Pythagoras to find length of third side of triangle, eg <math>7.5^2 - 6^2</math> or <math>6^2 + x^2 = 7.5^2</math></p> <p>or uses trigonometry to find angle in triangle eg <math>\sin A = \frac{6}{7.5}</math> or <math>\cos B = \frac{6}{7.5}</math></p> <p>P1 (dep P1) for complete process to find length of third side of triangle eg <math>\sqrt{7.5^2 - 6^2}</math> or <math>\sqrt{56.25 - 36}</math> or <math>\sqrt{20.25}</math> (=4.5) or uses trigonometry to find base length of triangle eg <math>7.5 \times \cos "A"</math> or <math>7.5 \times \sin "B"</math> or <math>\frac{6}{\tan "A"}</math></p> <p>P1 (dep P2) for <math>24 - 10 - "4.5"</math> (=9.5)</p> <p>P1 (indep) for process to find angle <math>CDA</math>, eg <math>\tan CDA = \frac{6}{base}</math> from right-angled triangle</p> <p>A1 for answer in the range 32.2 to 32.3</p>
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2	(a)	50.5	<p>M1 for <math>\cos ABC = \frac{7}{11}</math> (0.63...) oe</p> <p>A1 for answer in the range 50.4 to 50.51</p>	<p>Must be a complete statement for cos, sin or tan with all three elements present.</p> <p>If an answer is in the range 50.4 to 50.51 is given in the working space then incorrectly rounded, award full marks.</p> <p>If figures are given they must be correct (truncated or rounded).</p>
	(b)	Increase (supported)	<p>C1 States increase with supporting reason eg "<math>\frac{7}{10}</math> is greater than <math>\frac{7}{11}</math>" "<math>0.636</math> is less than <math>0.7</math>" ...."cos increases as angle decreases" "decreasing the denominator increases the value of the fraction" "angle is now <math>45.6</math>" (accept <math>45.5 - 45.6</math>)</p>	

3		99.5	<p>M1 for <math>\sin (34) = \frac{x}{178}</math> oe or alternative method to find <math>x</math></p>	<p>If an answer in the range 99.5 to 99.7 is given in the working space then incorrectly rounded, award full marks</p>
			<p>A1 for answer in range 99.5 to 99.7</p>	