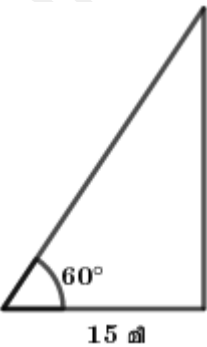
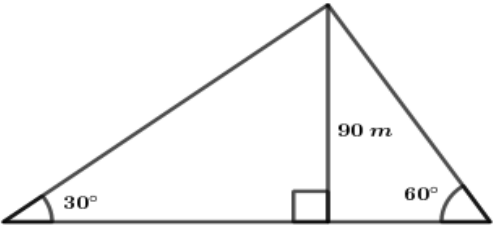
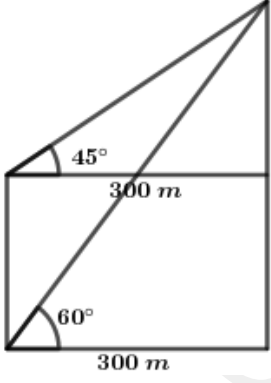
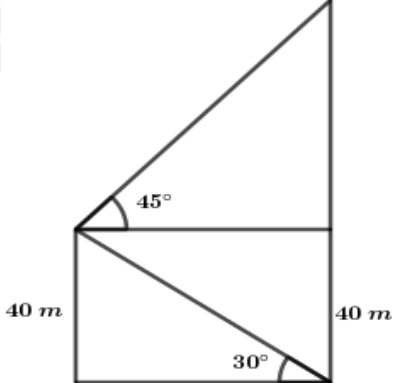


WANDOOR GANITHAM - S S L C UNIT TEST 2021

11.5AE

TRIGNOMETRY – ANSWER KEY

Qn no.	Key	Score	
1	<p>a) 4 cm</p> <p>b) $\frac{1}{2} \times 10 \times 4 = 20 \text{ cm}^2$</p>	1 1	2
2	<p>a) 45°</p> <p>b) $4 \times 4\sqrt{2} = 16\sqrt{2} \text{ cm}$</p>	1 1	2
3	<p>a) $\frac{AB}{BC}$</p> <p>b) $\tan 40^\circ \times \tan 50^\circ = \frac{BC}{AB} \times \frac{AB}{BC} = 1$</p>	1 1	2
4	<p>a)</p> <div style="text-align: center;">  <p style="margin: 0;">15 m</p> </div> <p>b) $15\sqrt{3} \text{ m}$</p> <p>c) $15\sqrt{3} \times \sqrt{3} = 45 \text{ m}$</p>	1 1 1	3
5	<p>a) 45°</p> <p>b) $8\sqrt{2} \text{ cm}$</p> <p>c) $16 + 4\sqrt{2} + 4\sqrt{6} \text{ cm}$</p>	1 1 1	3

6	<p>a)</p>  <p>b) $90\sqrt{3} \text{ m}$</p> <p>c) Distance between the second child and the tower = $\frac{90}{\sqrt{3}} \text{ m}$</p> <p>Distance between the children = $90\sqrt{3} + \frac{90}{\sqrt{3}} \text{ m}$</p>	1	4
7	<p>a)</p>  <p>b) $300\sqrt{3} \text{ m}$</p> <p>c) Side opposite to $45^\circ = 300 \text{ m}$</p> <p>Height of the hill = $300\sqrt{3} - 300 \text{ m}$</p>	1	4
8	<p>a)</p>  <p>b) $40\sqrt{3} \text{ m}$</p> <p>c) $40 + 40\sqrt{3} \text{ m}$</p> <p>d) marking the angles</p> <p>$80 : 40\sqrt{6} : 40 + 40\sqrt{3} = 2 : \sqrt{6} : 1 + \sqrt{3}$</p>	1	5