

Name: \_\_\_\_\_

Due Date: Tuesday 28<sup>th</sup> April

**Worded Problems – You must draw a diagram for each question**

<p>1. A 3 metres ladder leans against a wall so that the horizontal angle it makes with the ground is <math>52^\circ</math>. How far out from the wall does the ladder reach?</p>	<p>4. A balloon is attached to a 12 m piece of string. If the balloon is blown to an angle of <math>52^\circ</math> from the vertical, find its vertical height above the ground.</p>
<p>2. A ladder leans against a wall so that it is 1.5 m up the wall and 4.2 m out from the wall. Find the angle the ladder makes with the vertical.</p>	<p>5. Show the following on a diagram  a) <math>123^\circ</math> T  b) N <math>15^\circ</math> W  c) S <math>47^\circ</math> E  d) <math>260^\circ</math> T</p>
<p>3. A ship sails from port in the direction N <math>40^\circ</math> E. After the ship has sailed 25km, how far east of port is it? Draw a diagram.</p>	<p>6. While on vacation Aimee measured the angle of elevation to the top of a monument to be <math>64^\circ</math>. If she was standing 26.6 m away from the base of the monument, find the height of the monument? Provide a diagram?</p>

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