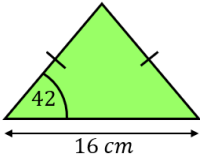


# Match-Up

# Trigonometry Worded Problems

<b>1</b>	A ladder is placed $1.5\text{ m}$ from the foot of a wall. The ladder reaches $3.8\text{ m}$ vertically up the wall. Find the angle between the ground and the ladder in degrees.
<b>2</b>	A plane-spotter sees a plane in the sky at an angle of elevation of $18^\circ$ . The plane is a horizontal distance of $40\text{ km}$ from the plane-spotter. Find the vertical height of the plane in kilometres.
<b>3</b>	A bird sits on the ground $9\text{ m}$ away from the base of a Christmas tree. The angle of elevation from the bird to the top of the tree is $52^\circ$ . How tall is the tree in metres?
<b>4</b>	A ship sails for $150\text{ km}$ on a bearing of $068^\circ$ . How far North has the ship sailed in kilometres?
<b>5</b>	The angle of depression from the top of a $120\text{ m}$ cliff to a boat in the sea below is $63^\circ$ . What is the distance in $\text{km}$ from the top of the cliff to the boat?
<b>6</b>	A ladder makes an angle of $75^\circ$ with the ground. The distance of the foot of the ladder to the wall is $1.45\text{ m}$ . How long is the ladder in metres?
<b>7</b>	Find the area of this isosceles triangle in $\text{cm}^2$ .
	
<b>8</b>	Malia is flying a kite on a $20\text{ m}$ long string. The string is at an angle of $35^\circ$ to the horizontal. Malia is holding the kite $1.1\text{ m}$ above the ground. Find the vertical height of the kite above the ground in metres.

<b>A</b>	13.0
<b>B</b>	134.7
<b>C</b>	57.6
<b>D</b>	68.5
<b>E</b>	12.6
<b>F</b>	11.5
<b>G</b>	56.2
<b>H</b>	5.6

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>