

## Match-Up



## <u>Trigonometry Worded Problems</u>

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

A	13.0				
В	134.7				
C	57.6				
D	68.5				
E	12.6				
F	11.5				
G	56.2				
Н	5.6				

1	2	3	4	5	6	7	8