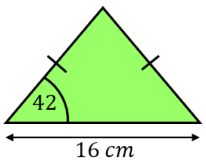
Match-Up — Trigonometry Worded Problems

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 $18°$. 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 $52°$. How tall is the tree in metres?
4	A ship sails for $150\ km$ on a bearing of $068°$. 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 $63°$. What is the distance in km from the top of the cliff to the boat?
6	A ladder makes an angle of $75°$ 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 $35°$ 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
B	134.7
C	57.6
D	68.5
E	12.6
F	11.5
G	56.2
H	5.6

1	2	3	4	5	6	7	8
D	A	F	G	B	H	C	E