

PHYSICS 534

EXERCISE-05

Trig Functions



Pierre Curie was awarded the Nobel prize for physics in 1903 for his work on spontaneous radioactivity.

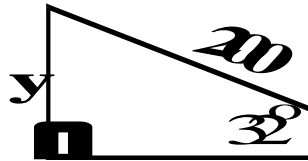
CURIE

Given the hypotenuse of a right triangle, with reference to angle A, the other two sides are found using the sine and cosine functions as illustrated on the right.

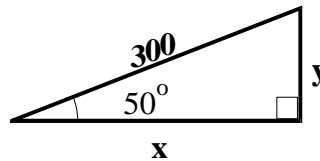


1. Calculate the unknown sides "X" and "Y" in each of the following triangles:
(Round off your answer to the nearest whole number)

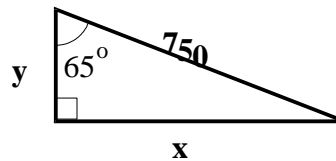
a) $X =$ 170
 $Y =$ 106



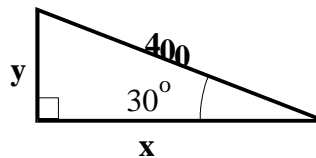
b) $X =$ 193
 $Y =$ 230



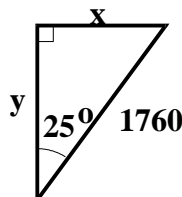
c) $X =$ 680
 $Y =$ 317



d) $X =$ 346
 $Y =$ 200

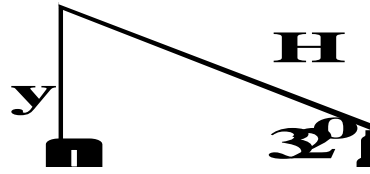


e) $X =$ 744
 $Y =$ 1595

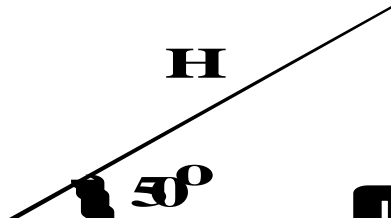


2. Calculate the unknown sides in each of the following triangles:
 (Round off your answer to the nearest whole number)

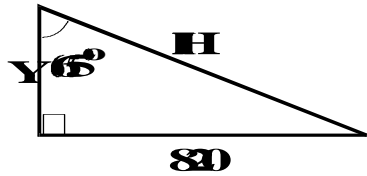
a) $H =$ 236
 $Y =$ 125



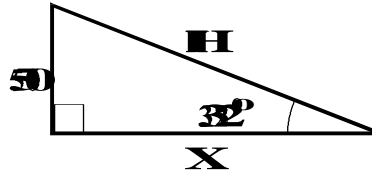
b) $H =$ 392
 $X =$ 252



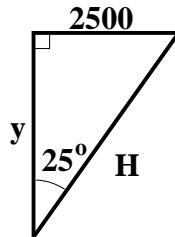
c) $H =$ 905
 $Y =$ 382



d) $H =$ 94
 $X =$ 80



e) $H =$ 5916
 $Y =$ 5361



f) $H =$ 1414
 $Y =$ 1000

