

Solve for x . Be sure to first prove that the triangles are similar.

a)

Statement	Reason

b)

Statement	Reason

Use *special right triangles* to find the exact values for each variable.

a)

b)

c)

d)

A ground squirrel looked up at an angle of 49° and spotted a hawk perched on a 27 foot pole. How far does the hawk have to directly fly to capture the squirrel? Include a sketch of the situation.

Cassandra was temporarily lost at sea on her surfboard until the Coast Guard sent a helicopter to find her. When the helicopter was hovering 50 feet over her, the pilot looked down at an angle of 34° and saw a shark swimming towards Cassandra. How far was the shark to Cassandra?