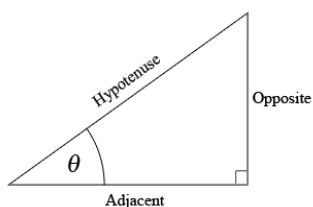


7.5 Solve Problems Involving Right Triangles

7.5 Solving Problems Involving Right Triangles



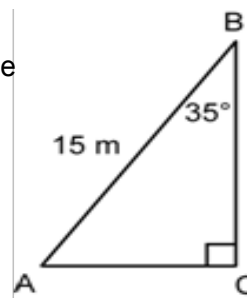
$$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

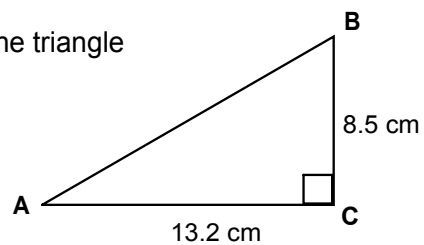
$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$$

DO IT NOW!!!

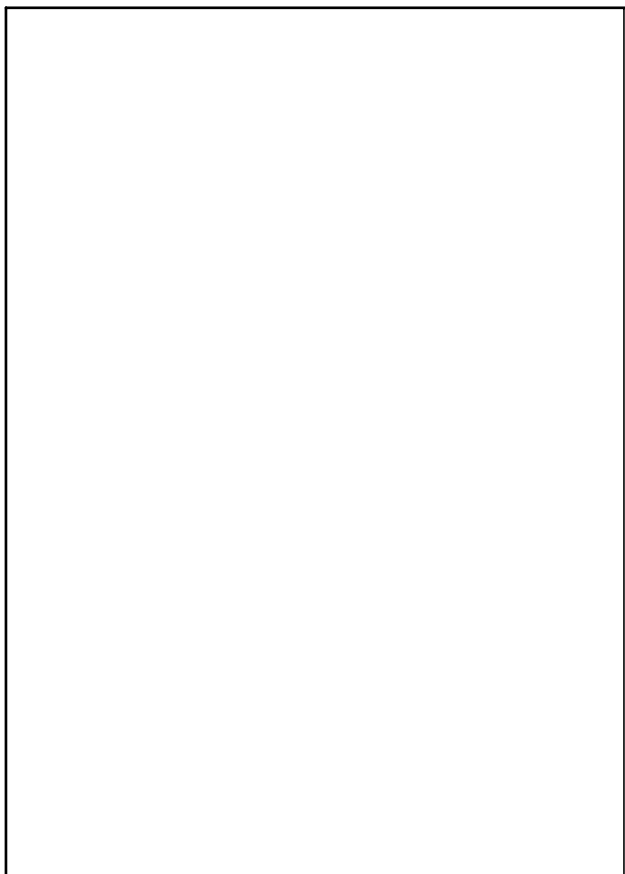
1 Solve the triangle



2 Solve the triangle



7.5 Solve Problems Involving Right Triangles



Before doing application questions, we need to know:

1) Angle of depression (aka declination)

angle measured below the horizontal



2) Angle of elevation (aka inclination)

- angle measured above the horizontal



Kim and Yuri live in apartment buildings that are 30 m apart. The angle of depression from Kim's balcony to where Yuri's building meets the ground is 40° . The angle of elevation from Kim's balcony to Yuri's balcony is 20° .

a) How high is Kim's balcony from the ground?

b) How high is Yuri's balcony from the ground?

