

Name:

Date:

Period:

Projectiles #3

Evel Knievel is attempting to jump his motorcycle from the roof of one building to the roof of another building that has the same height. To do so he rides at 25 m/s and uses a ramp with a 30° angle.

(a) Draw a diagram of the situations and write down knowns and unknowns.

(b) What are the x - and y - components of Evel's initial velocity?

(c) How much time will it take Evel to land?

(d) How far forward will he travel in this time?

(e) The buildings are 50 meters apart. Did he make it?