Steepest Street Claims
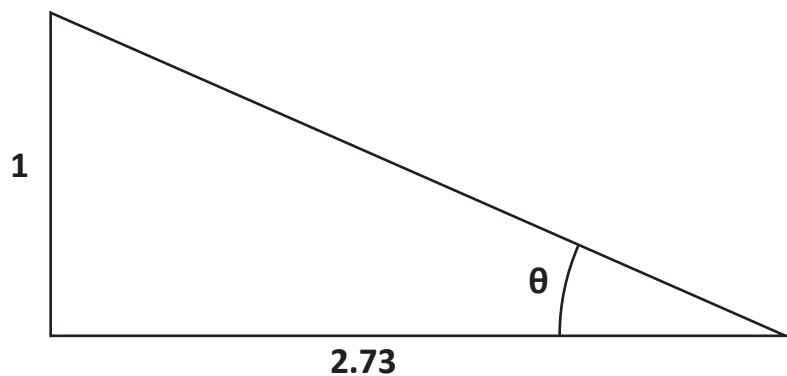
1. A street in south Wales, Fford Pen Llech, is the most recent challenger to Baldwin Street's claim to being "The world's steepest street."

The steepest section of the Welsh street has this gradient.

1

θ

2.73

a. Use trigonometry to find the angle of elevation, θ.

b. The UK traffic authorities put up a street sign giving the gradient as 40%. Is that percentage correct?

c. Is Fford Pen Llech steeper than Baldwin Street?

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2.   There are few other challenges to the claim about Baldwin Street. Imagine you work for the Guinness Book of Records.

Would you give any of these streets the record for being the steepest?

   a. Eldred Street in Los Angeles has these measurements.

211.08 m

66.75 m
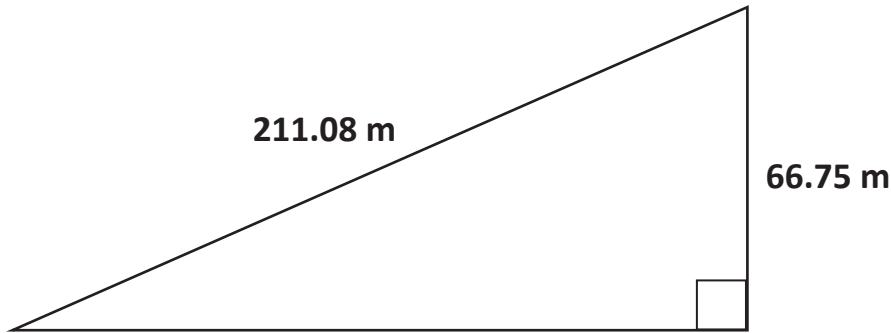
What is the horizontal run of Eldred Street?
What is the angle of ascent?

b.   Côtes St-Ange, in Chicoutimi, Quebec, has these measurements.

18˚

238.78 m
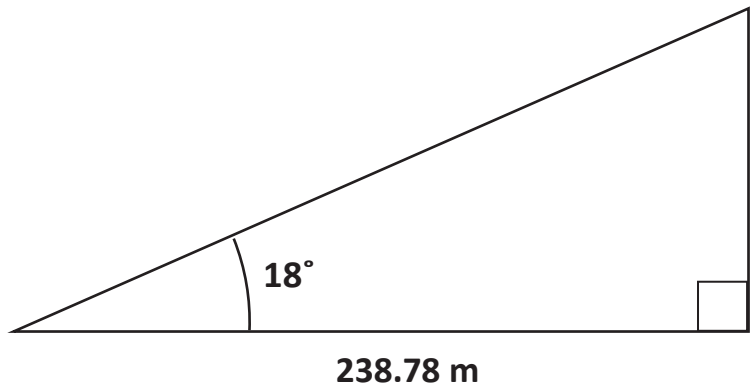
Is Cotes St-Ange longer than 350m, the length of Baldwin Street?
What is the total rise in Côtes St-Ange in metres?

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c. Canton Avenue, in Pittsburgh, has a final hill section that is 6.5 metres long with an angle of 37˚. That would make it the steepest street. However, the whole street is 192 metres long with an average gradient of 14.1%.

Create a sketch of the profile of Canton Avenue that includes all this information.

What is the average angle of ascent for Canton Avenue?
Should it be given the title of "The World's steepest street?"