

# Mathematical Expression

“Elementary, my dear Watson” –Sherlock Holmes

# Essential Question

What part does mathematics play in the communication of design ideas?

# Reality

- Sometimes math can become overwhelming
- Engineering programs \_\_\_\_\_ mathematics
- Mathematics is one of the \_\_\_\_\_ important tools available to an Engineer to reach \_\_\_\_\_  
\_\_\_\_\_.

# Uses for Math

OA tool to \_\_\_\_\_ solutions

OA tool for \_\_\_\_\_ solutions

Can you think of a few practical uses?

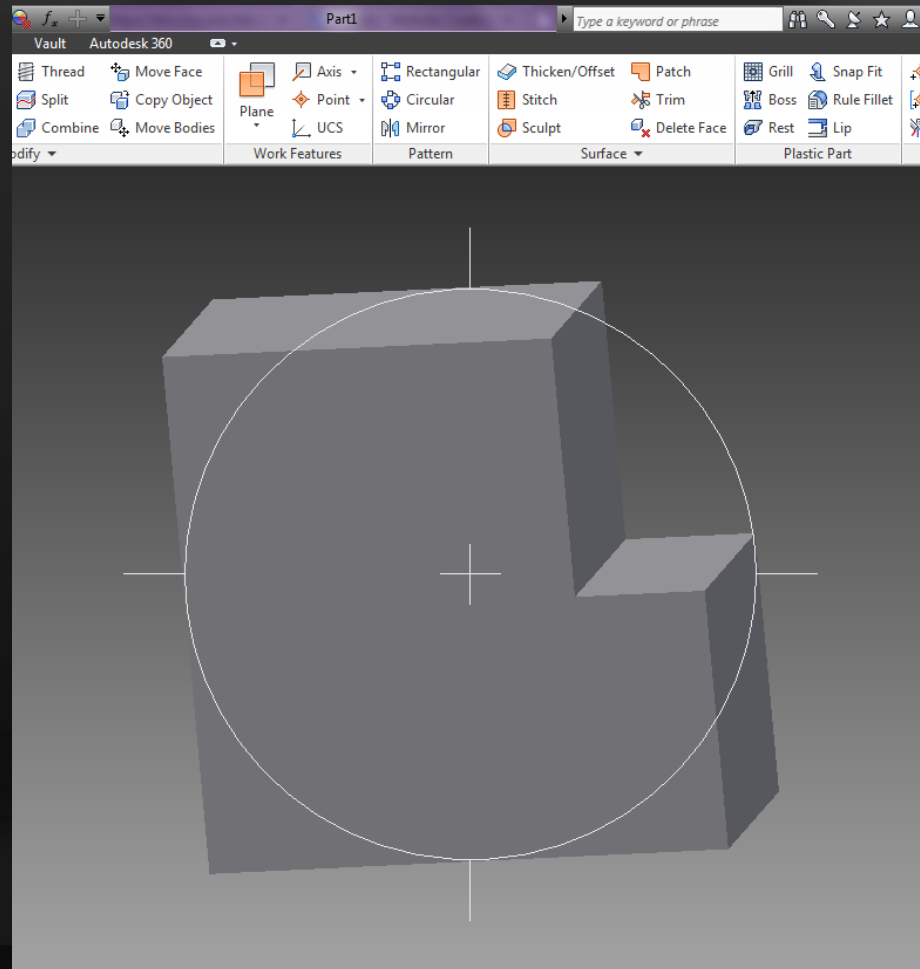
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# Example

Real world example, build the step below:



What are you missing? \_\_\_\_\_

# Example

Try again

Are you able to build this model now? Why or why not?

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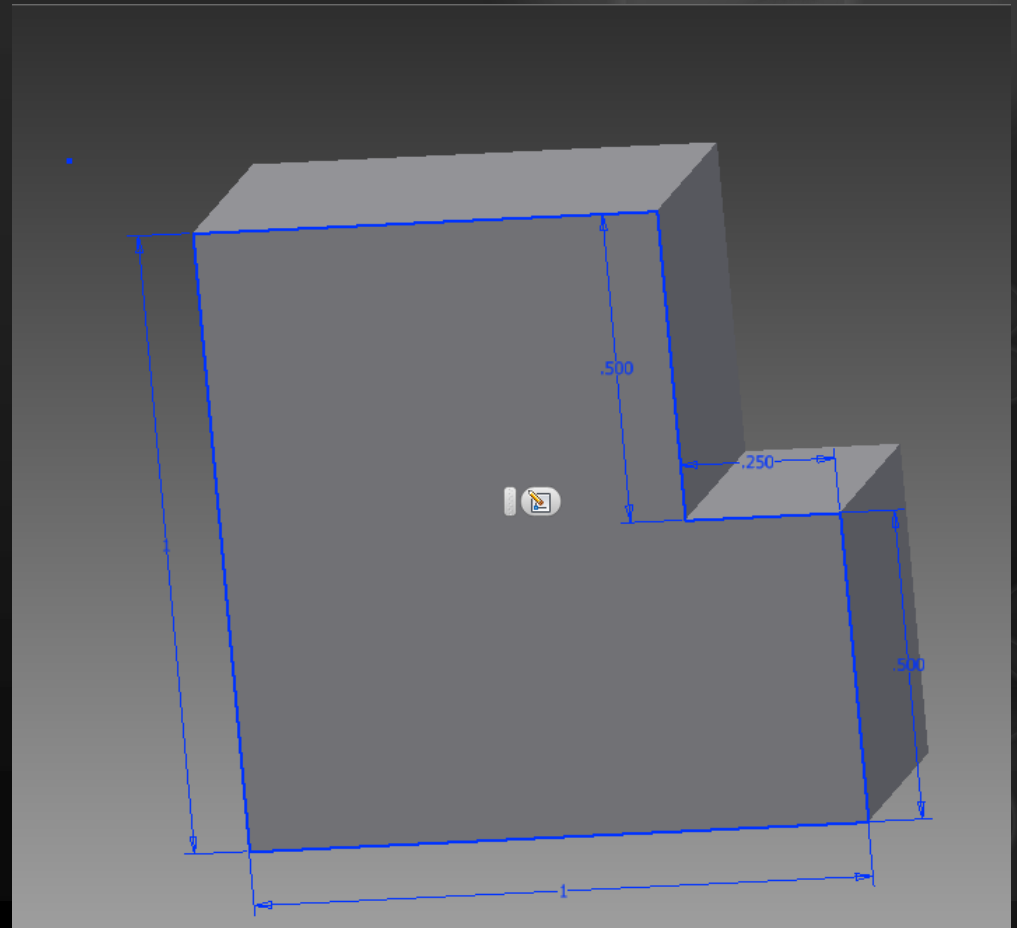
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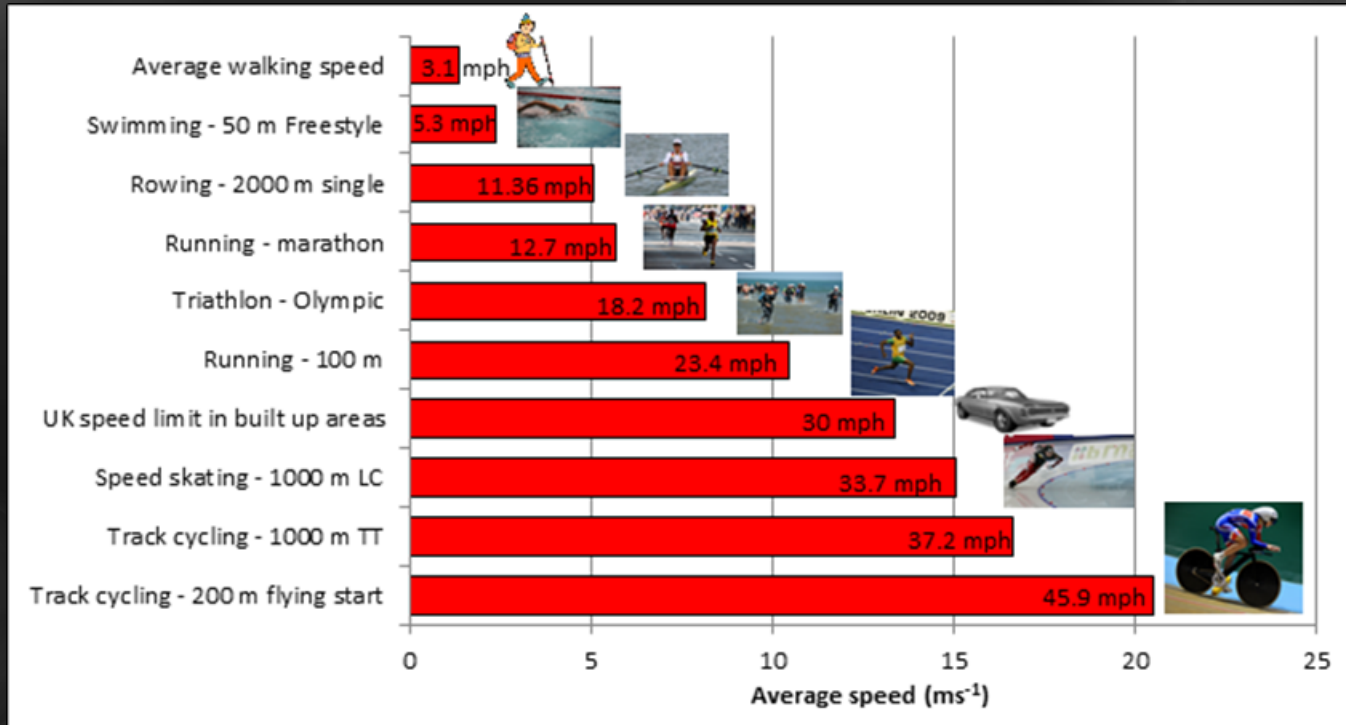
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# Which mode of transportation is faster? Why?







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# Resources

VCSU Staff. Unit#3 engineering graphics, Reading assignment. Valley City State University, Valley City, ND. Retrieved from: [https://bb.vcsu.edu/bbcswebdav/pid-511404-dt-content-rid-5542239\\_2/courses/STEMED\\_660\\_FLL\\_2014/660%20Unit%203%20Reading.pdf](https://bb.vcsu.edu/bbcswebdav/pid-511404-dt-content-rid-5542239_2/courses/STEMED_660_FLL_2014/660%20Unit%203%20Reading.pdf)

Graph of speed sports retrieved from: <http://engineeringsport.co.uk/2012/08/01/high-speed-sports/>

Buyers Guide Graph retrieved from: <http://www.ign.com/articles/2013/11/15/gta-v-infographic-makes-comparing-vehicles-easy>