

G-MG How many leaves on a tree?

Task

Amy and Greg are raking up leaves from a large maple tree in their yard and Amy remarks "I'll bet this tree has a million leaves." Greg is skeptical. Amy suggests the following method to check whether or not this is possible:

- Find a small maple tree and estimate how many leaves it has.
- Use that number to figure out how many leaves the big maple tree has.
- a. Describe the assumptions and calculations needed to carry for Amy's strategy.

b. Amy and Greg estimate that their maple tree is about 35 feet tall. They find a 5 foot tall maple tree and estimate that it has about 400 leaves. Use your work from part (a) to estimate the number of leaves on Amy and Greg's tree.



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