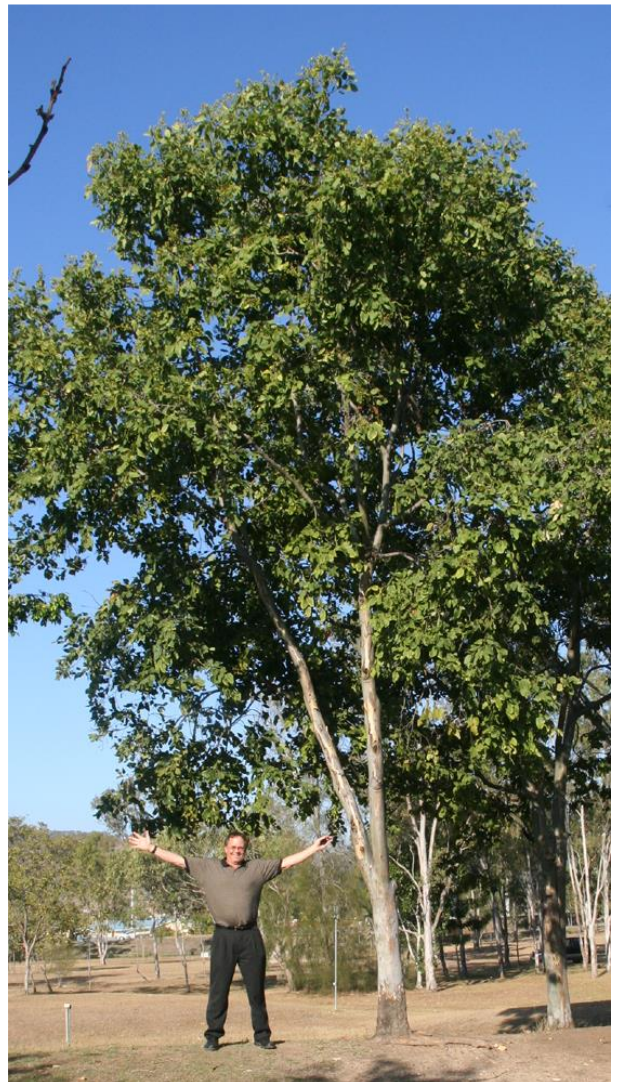


Ratio Word Problems

- The ratio of boys : girls in a class is 3 : 4.
 - If the class has 9 boys, how many girls?
 - If the class has 8 girls, how many boys?
 - If the class has 35 students, how many boys, and how many girls?
- The ratio of chickens : geese in a farmyard is 5 : 2.
 - If there are 30 geese, how many chickens?
 - If there are 30 chickens, how many geese?
 - If there are 21 geese and chickens altogether, how many chickens, and how many geese?
- Concrete is made from three ingredients - cement, water and aggregate (small rocks). A typical ratio of cement : water : aggregate is 1 : 2 : 7.
 - If I want to make 200 kg of concrete, what weight of each of the ingredients do I need?
 - If I need 60 cubic metres of concrete, what volume of each ingredient do I need?
- The ratio of flour to fruit to nuts (by weight) for a Christmas cake is 8 : 5 : 3.
 - If my cake uses 60 grams of nuts, then what weight of fruit do I need? What weight of nuts?
- A recipe calls for 6 ml of vanilla and $\frac{3}{4}$ cup of sugar. I want to triple this recipe.
 - How much vanilla do I need? How much sugar do I need?
- When boiling rice, the ratio of water : rice is $2\frac{1}{2}$: 1.
 - I am boiling 3 cups of rice. How much water do I need?
- A cookbook says that 2 cups of rice will serve 6 people.
 - How many cups do I need to serve 11 people?

Challenge

- If Mr Boggs is 176 cm tall, how tall is the tree?



Ratio Explorations

1. *Genius-in-Training*

A recipe calls for 6 ml of vanilla and $\frac{3}{4}$ cup of sugar.

I want to double this recipe.

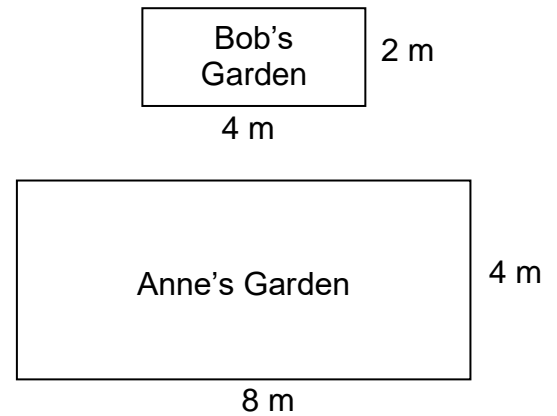
How much vanilla do I need?

How much sugar do I need?

2. *Budding Genius*

How many times **longer** is Anne's garden than Bob's garden?

How many times **bigger** is Anne's garden than Bob's garden?



3. *Genius*

A normal batch of mixed herbs is made up of 4 kg of sage, 2 kg of oregano and 6 kg of basil. I want to make up a 30 kg batch of mixed herbs. How much of each herb do I need?