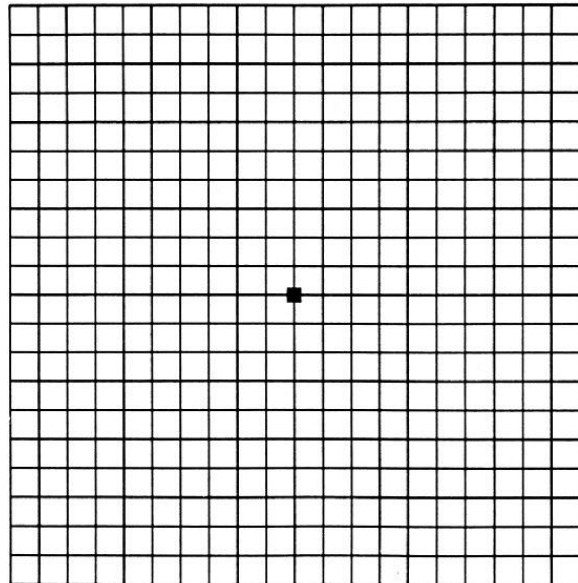# Quiz - Lines

Math 10 - Chapter 6

Izzy wants to have her hair as long as possible before graduation. Assuming that her hair grows at a constant rate and it is 25 cm long today and last month is was 23.8 cm long:
- A) Sketch a graph that shows the rate of growth
- B) What is the slope?
- C) What is the y intercept?
  - a) What does it represent?
- D) Write an equation in slope-intercept form that describes how Izzy's hair length, L, in cm, grows each month, m.
- E) Predict the length of Izzy's hair at graduation in 2 years.

At the Barriere Fall Fair, mini donuts sell for $6 a bag, and giant ice cream cones for $8 a cone (Becky says they're big). If the total sales of donuts and cones was $4, 200:
   a) Write an equation in general form that represents the days food sales
   b) Find the x and y intercepts and explain what they mean
   c) What is the domain and range?
   d) If they sold 120 bags of donuts, how many ice cream cones did they sell?

The slope of line 1 is $\dfrac{4}{5}$ and line 2 is $\dfrac{16}{x}$
What is the value of x if:

The lines are parallel:

The lines are perpendicular: