

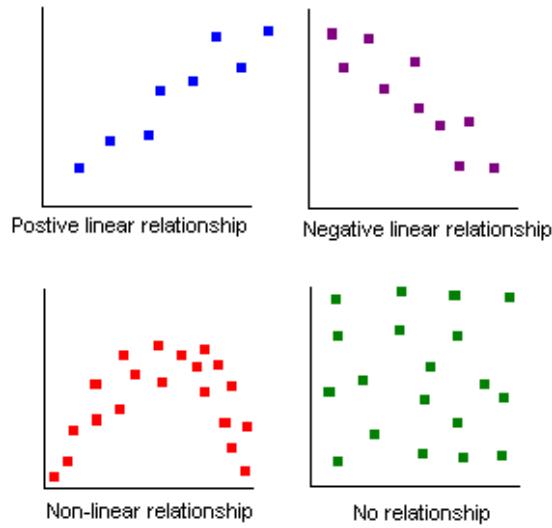
MPM 1D

SCATTER PLOTS & LINES OF GOOD FIT

A **line of best fit** (or "trend" line) is a straight line that best represents the data on a scatter plot. This line may pass through some of the points, none of the points, or all of the points.

In the graphs to the right, draw the trend line for the relationships that represent a linear model.

Explain why they are labelled as a positive or a negative linear relationship.



For each question that follows:

- Create a scatter plot – decide on independent/dependent variables, continuous/discrete data, horizontal/vertical scales (with or without breaks)
- Determine the equation of the line of good fit.
- Pose a question and solve it using the equation; compare your answer with the graph.

① THAT'S A FINE SPEED YOU'RE DOING!



②



③

Hot Beverages



Coffee				
Available in Decaf				
124	133	152	171	190
x-small	small	medium	large	x-large

Tea				
Steeped • Specialty Tea				
124	133	152	171	190
x-small	small	medium	large	x-large

TIM HORTONS SHUFFLES SIZES

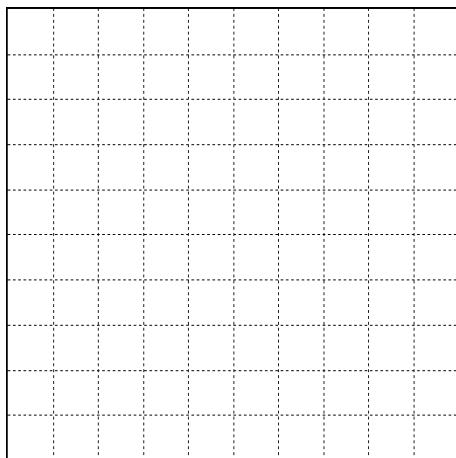
Tim Hortons shuffles cup sizes to accommodate new extra large.

New extra small, formerly small New small, formerly medium New medium, formerly large New large, formerly extra large New extra large



SOURCES: TIM HORTONS

ANDREW BARR / NATIONAL POST



④ Is there a relationship between the fat grams and the total calories in fast food?

Sandwich	Total Fat (g)	Total Calories
Hamburger	9	260
Cheeseburger	13	320
Quarter Pounder	21	420
Quarter Pounder with Cheese	30	530
Big Mac	31	560
Arch Sandwich Special	31	550
Arch Special with Bacon	34	590
Crispy Chicken	25	500
Fish Fillet	28	560
Grilled Chicken	20	440
Grilled Chicken Light	5	300

