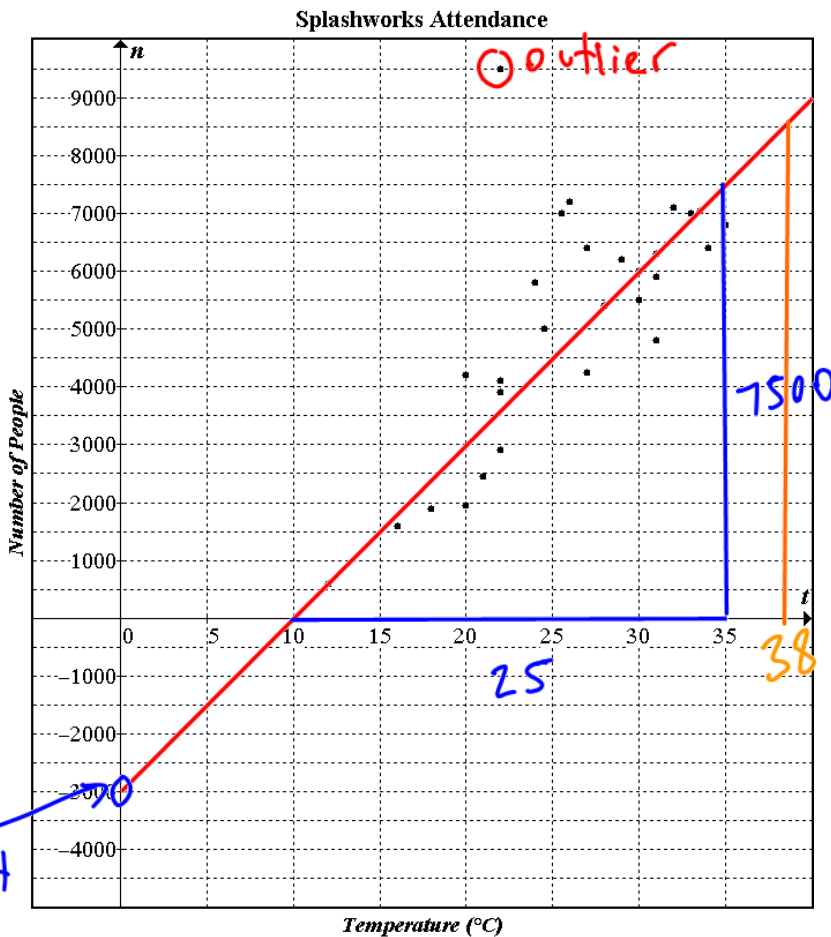


Mathematics 9
Canada's Wonderland Scatter Plot

Date: _____

Last summer Paul had a manager's job at Canada's Wonderland. As part of his job, each day he recorded the day's high temperature and the number of people that visited 'Splashworks'. His data for the month of July is shown on the graph below.



a) Classify the type of correlation that exists between the number of people and the temperature.

positive, linear, weak

b) What is the data entry at (22, 9500) called? outlier

c) Draw a line of best fit.

d) Determine the equation for your line of best fit. $N = 300t - 3000$

e) From your equation from part (d):

i) State the vertical intercept. -3000. State the slope $300 = \frac{7500}{25}$

ii) What does the vertical intercept represent? # of people at 0°C

iii) Does this value make sense? Justify your answer.

no, # of people cannot be negative

iv) The slope is in units of # of people per temperature.

v) What does the horizontal intercept represent? temperature no one comes

vi) Predict the number of people they can expect if the temperature reaches 38°C. 8500