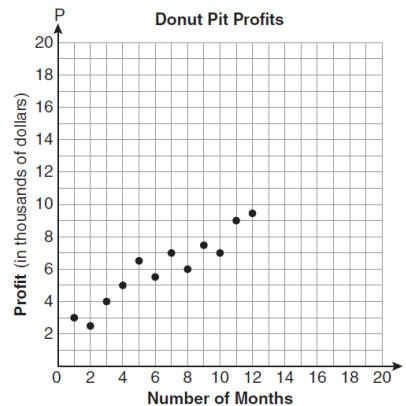


Name: _____

Regression Test Warm-up

1. Megan and Bryce opened a new store called the Donut Pit. Their goal is to reach a profit of \$20,000 in their 18th month of business. The table and scatter plot below represent the profit, P , in thousands of dollars, that they made during the first 12 months.

t (months)	1	2	3	4	5	6	7	8	9	10	11	12
P (profit, in thousands of dollars)	3.0	2.5	4.0	5.0	6.5	5.5	7.0	6.0	7.5	7.0	9.0	9.5



1. Draw the line of best fit and find the equation of the line by hand.
2. Interpret the slope and y-intercept in context.
3. Use your equation to find the profit during the 18th month.
4. Use your equation to find when the profit will be 20 thousand dollars.
5. Use your calculator to find the regression equation. Compare this to your answer in #1.