Oil and Natural Gas Production Profit

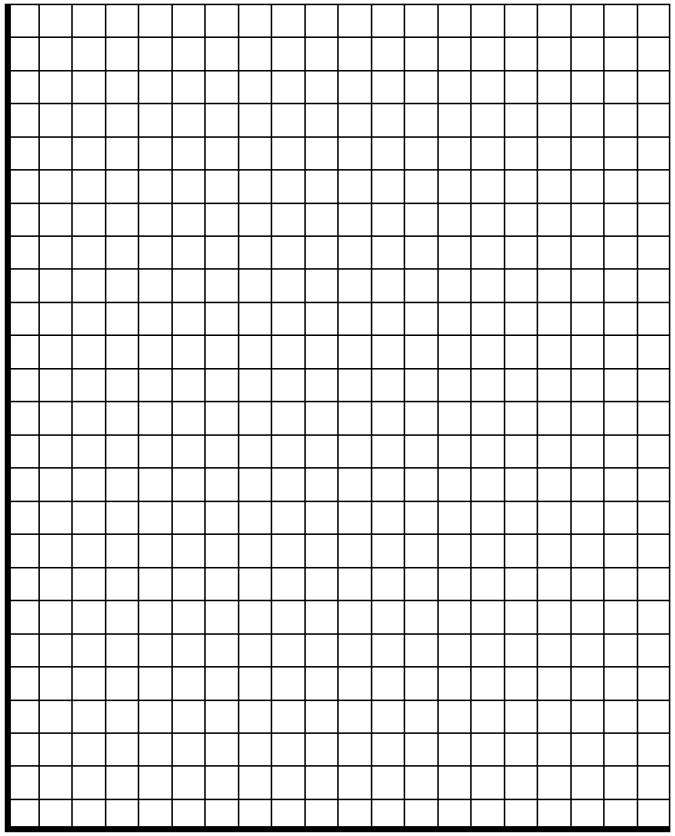
Part Two

Your company is ready to drill a well. You have two choices for sites to drill. Wellsite A will require an initial good faith payment of $5,000 and an additional $200 per day. Wellsite B requires a payment of $3,000 and an additional $250 per day. The potential for both wells is a production of 50 barrels a day at a price of $65 per barrel.

A) Determine a function, A(x), which can be used to calculate the cost of drilling Wellsite A for x number of days.

B) Determine a function, B(x), which can be used to calculate the cost of drilling Wellsite B for x number of days.

C) Determine the point, **graphically,** that results in an equal cost for both wells.



D) Determine the point, **algebraically,** that results in an equal cost for both wells.

E) In the context of this scenario, explain what the x-value and y-value of this point represents.

F) After that day, which wellsite will be the least expensive to operate? Justify your answer.

G) Using wellsite A, what would be your profit at 30 days of operation?

H) Using wellsite B, what would be your profit at 30 days of operation?