

## Advanced Math

1-2

(Day 2)

### Lines and Slope

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- 93) Your salary was \$28,500 in 1994 and \$32,900 in 1996. If your salary follows a linear growth pattern, what will your salary be in 1999?
- 99) A contractor purchases a piece of equipment for \$36,500. The equipment requires an average expenditure of \$5.25 per hour for fuel and maintenance, and the operator is paid \$11.50 per hour.
- Write a linear equation giving the total cost  $C$  of operating this equipment for  $t$  hours. (Include the purchase cost of the equipment.)
  - Assume customers are charged \$27 per hour of machine use, write an equation for the revenue  $R$  derived from  $t$  hours of use.
  - Use the profit formula,  $P = R - C$ , to write an equation for the profit derived from  $t$  hours of use.
  - Use the result in part c to find the number of hours this equipment must be used to find the break even point (a profit of \$0).

Assignment: pg. 131 91 - 104 all, 107-110 all
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