

**TAKE NOTES ON LINED PAPER. COPY PROBLEM
(IMPORTANT INFORMATION) DOWN FIRST**

Section 1.1 Modeling and Equation Solving

Ex. 1) The engineers at an auto manufacturer pay students \$0.08 per mile plus \$25 per day to road test their new vehicles.

a) Write a LINEAR EQUATION to model the situation.

Define variables!

b) How much did the auto manufacturer pay Sally to drive 440 miles in one day?

c) John earned \$93 test-driving a new car in one day. How many miles did he drive?

EX 2) Solve the following equations

a) $2x^2 - 5x + 2 = (x - 3)(x - 2) + 3x$

b) $x(x + 7) = 14$

$$\mathbf{c) \ 144 = 16t^2}$$

$$\mathbf{d) \ (x - 9)^2 = 49}$$