

Chapter 1 – Section 1.4 Formulas for Linear Functions Part 1

TICKET-IN-THE-DOOR

In order to be prepared for class you must watch the module and complete the following activity. This is due first thing when you get to class.

Write the general formula for the **equation of a line** in:

- *Standard* form
- *Slope-Intercept* form
- *Point-Slope* form

Check your understanding:

Find the linear model for the following linear functions and write each formula in slope intercept form.

1. $P = h(t)$ give the size of a population that begins with 12,000 members and grows by 225 members each year.
2. A new Toyota RAV4 cost \$21,500. The car's value depreciates linearly \$3200.00 per year.
3. In 2006, the population of a town was 18,310 and growing by 58 people per year.
4. The following table gives the cost $C(n)$ of producing a certain good as a linear function of n , the number of unites produced.

| | | | | |
|----------------|-------|-------|-------|-------|
| n (units) | 100 | 125 | 150 | 175 |
| $C(n)$ dollars | 11000 | 11125 | 11250 | 11375 |

5. Write a **linear model** in $y = mx + b$ form that satisfies $f(0.3) = 0.8$ and $f(0.8) = -0.4$