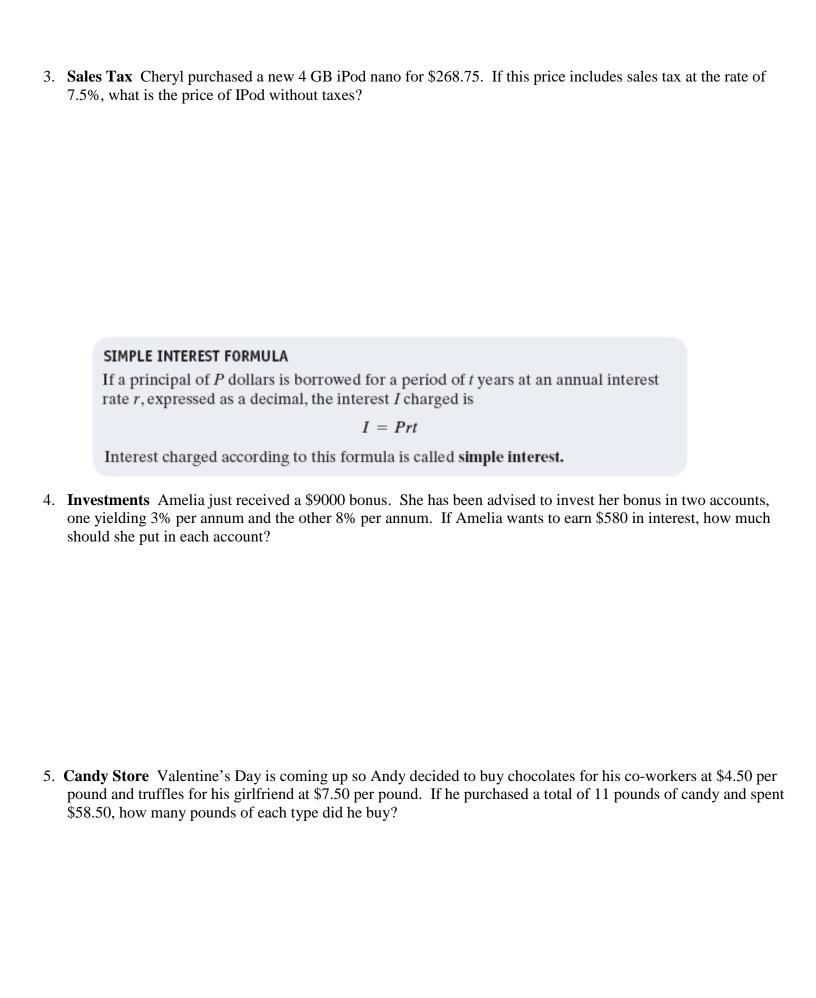
Mini-Lecture 1.2

An Introduction to Problem Solving

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Learning Objectives:	
2.] 3.]	Translate English sentences into mathematical statements. Model and solve direct translation problems. Model and solve mixture problems. Model and solve uniform motion problems.
Prepari	ing for Problem Solving:
Exp	oress each English phrase as an algebraic expression.
i	<i>i</i>) 9 less than a number, <i>t</i>
i	<i>ii</i>) 2 more than 4 times the height, <i>h</i>
Examp	<u>les:</u>
1. ′	Translate each of the following English statements into a mathematical statement. Then solve the equation
i	a) The difference between -12 and a number, x , is 20.
1	b) Twice the sum of a number, z, and 3 is the same as 5 times the number.

2. **Consecutive Integers** The sum of three consecutive odd integers is -147. Find the integers.



UNIFORM MOTION FORMULA

If an object moves at an average speed r, the distance d covered in time t is given by the formula

$$d = rt$$

6. **Boats** Two boats are traveling towards the same port from opposite directions. They are 63 miles apart and one boat is traveling 6 mph faster than the other. If the boats both reach the port in 4 hours and 30 minutes, find the speed for each.