r:

# Math Lab Unit: Problem Solving (1.5)

## Formula Sheet

Distance Formula: Use page 30 in the textbook for formulas.

**Ex:** How far do you travel if you drive 60 miles per hour for 3 hours?

**Ex:** How long does it take to run 100 meters at a rate of 25 m/s?

**Ex:** Usain Bolt set a world record in the 100 meter dash with a time of 9.58 seconds. What is his average speed during the sprint?

## Celsius - Fahrenheit Conversion Formulas:

**Ex:** What is the temperature in Celsius if it is 50°F?

### Profit:

**Ex:** Student council spends \$200 to plan a student/staff charity basketball game. How much profit do they make if they sell 350 tickets for \$3 each?

**Ex:** You want to make and sell chocolate lollipops. The cost to make each lollipop is \$0.50, which includes the stick, chocolate and candy topping. You plan to sell your lollipops at lunch for \$1.00. What will be your total profit if you make 50 lollipops but only sell 40? Was it worth it to sell them?

### Interest Formula:

**Ex:** You buy a car that costs \$15,500. Your interest rate is 6% for a five-year period.

- a) What is the total amount you will pay in interest?
- b) What is the total amount you will pay for the car?
- c) What will be the cost of your monthly payments?