BLM 10-14

Chapter 10 Wrap It Up!

This worksheet will help you with the Wrap It Up! on page 403.

Follow the guidelines below to prepare a report on how different linear equations could be used in everyday situations.

- **1.** The Wrap It Up! can be done as a written report, a poster, a Foldable, a PowerPoint presentation, or in another form of your choice. State the form you will use.
- **2.** The table will help you to organize the information for your report.
 - For each linear equation in the table, describe a situation or job that uses the equation. You may refer to examples in the chapter for ideas.
 - Identify what each variable, numerical coefficient, and constant represents in each of your equations.
 - Solve each equation, using values appropriate to the situation.

The first row is done as an example.

| Equation Type | Equation | Situation or Job | Identification of Variables, Coefficients, and Constants | Solution |
|------------------|----------|--|---|---|
| ax = b | 15t = d | Distance travelled by bike at a constant rate of 15 km/h | <i>t:</i> time in hours <i>d:</i> distance in km 15: rate of speed in kilometres per hour | 15t = 45 t = 3 It would take 3 h to travel 45 km. |
| ax = b | | | | |

BLM 10-14 (continued)

| $\frac{x}{a} = b$ | | |
|-----------------------|--|--|
| | | |
| | | |
| ax + b = c | | |
| | | |
| | | |
| $\frac{x}{a} + b = c$ | | |
| | | |
| | | |
| a(x+b)=c | | |
| | | |
| | | |

3. Choose one of your equations and identify how it may change based on the circumstances.

For example, look at the equation in the first row of the table. If it is raining, the constant rate may be reduced to 14 km/h. Then, the equation changes to 14t = d.

- a) What equation will you use?
- **b)** Identify how the equation may change, based on the circumstances.