

Shop Algebra Overview 200

Basically there are six steps that need to be used to successfully complete an application problem. This assignment requires that each step be shown. An example is given to show the steps.

1. **Read the problem** just to understand what the problem is, then read it again to start to see the information you will need to solve the problem.
2. With only one unknown quantity, **assign a variable** to represent it. Explain what the variable represents.
3. Use the information from # 1 & # 2 to **write an equation** that will solve for the unknown.
4. Using the operations taught in this chapter, **solve the equation**.
5. **State the answer** to the equation with a proper label. This is not always the needed answer to the question, so look and see if more work is required.
6. **Check** and see if this answer looks reasonable and fits with the information given in the application.

* * * * *

Use the 6 steps listed above to solve the following:

1. Bob ordered four crates of bar stock. The first weekend he used one full crate. The next weekend he used 140 bars. If two boxes plus 60 bars remain. How many bar stocks are in each box?
2. When eight times a number is subtracted from eleven times the number the result is -9. What is the number?
3. Jill can complete five less than three times as many inspections as Mary. If Jill has completed 13 inspections, how many inspections has Mary completed?
4. John is using the shop floor jack to lift 180 lbs. This is 2 lbs less than six times the safe maximum weight limit of the floor jack. How much weight can this floor jack safely be used to lift?



Unless otherwise noted, this work by the *Project IMPACT* Nebraska Community College Consortium is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

This product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.