

Chapter 1-1 Notes

Problem Solving Plan

- 1) **Understand** - read the problem; ask questions like "what do I know?" and "what do I need to find out?"; try to estimate
- 2) **Plan** - determine a strategy; do I need to define a variable; what operations are needed; can I write an expression or an equation; should I draw a picture, diagram, and/or graph
- 3) **Solve** - use your plan and math skills
- 4) **Check** - is the answer reasonable; does it make sense; is it close to my estimate

Example 1: Based on the data, about how many times more students sign up for volleyball than jazz band?

Hint: use rounding to make the calculations easier.

Activity	Number of Students
cheerleading	56
jazz band	16
photography	28
volleyball	87

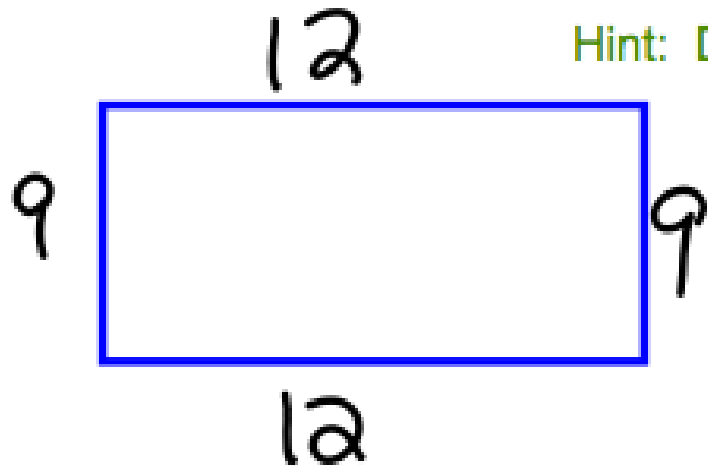
VB 90

JB 15

$$90 \div 15 = 6 \text{ times}$$

Example 2: A rectangular garden is 12 meters long and 9 meters wide. A border is sold in 1.5-meter sections. How many sections are needed to surround the garden?

Hint: Draw a picture and label the sides.



$$12 + 12 + 9 + 9 = 42 \text{ meters}$$

$$\begin{array}{r} 28. \\ \hline 1.5 \overline{) 420} \\ \underline{-30} \downarrow \\ 120 \\ \underline{-120} \\ 0 \end{array}$$

28 sections
to buy