

**CHALLENGE PROBLEMS [Courtesy of and Created by Jessica Barnett]**

Examine the relationships shown in the graphics below and use any problem-solving strategy you choose to determine what number each picture in the graphic represents. Hint: You may not always want to start at the first line. NOTE: within one puzzle, a picture will always represent the same number.

Submit your work/rationale as well as your answers to Mr. Coleman by 1 pm on Friday of each week. Correct answers with well-explained solution strategy/process or clearly and completely shown work) will be entered into a drawing for a small prize (and BRAGGING RIGHTS).

Puzzle Wk3

**CHALLENGE PROBLEM**

$$\begin{aligned} \text{Apple} + \text{Apple} &= 24 \\ \text{Apple} - \text{Backpack} &= 4 \\ \text{Backpack} + \text{Backpack} - \text{Lunchbox} &= 11 \\ \text{Apple} - \text{Backpack} + \text{Lunchbox} &= \underline{\hspace{2cm}} \end{aligned}$$

Puzzle Wk8

**CHALLENGE PROBLEM**

$$\begin{aligned} \text{Coffee Cup} + \text{Coffee Cup} + \text{Leaf} &= 38 \\ \text{Leaf} + \text{Apple} &= 25 \\ \text{Apple} - \text{Coffee Cup} &= 3 \\ \text{Coffee Cup} + \text{Leaf} - \text{Apple} &= \underline{\hspace{2cm}} \end{aligned}$$