**Expressions and Equations**

What are similarities between an expression and an equation?

What are differences between an expression and an equation?

**Putting Words into Equations or Expressions**

*After reading the following scenarios, determine 1) if there is enough information to solve the question/problem 2) the answer to the question/problem when appropriate. SHOW ALL WORK!*

1. A notebook costs $2.95 each, and two pens cost $1.95. A set of colored pencils and 4 pens have the same cost as 3 notebooks. How much does a set of colored pencils cost? (Mathematics Teaching in the Middle School, April 2015, p. 464)
2. Every student in the ninth-grade class is a member of the Rubik’s cube club and/or the origami club. Twenty-eight students belong to the Rubik’s cube club, 5/6 of the students belong to the origami club, and ½ the students belong to both clubs. How many students belong to the origami club, but not to the Rubik’s cube, club? (Mathematics Teacher, Calendar Problem March 12, 2012)
3. Sarah is a one-upper (well, a three-upper I suppose). Every week Sarah reads three more books than her sister, Evelyn. How many books does Evelyn read each week?

1. The dimensions of a rectangular prism are consecutive integers, and its surface area is 2644 units2. Find the volume of the prism. (Mathematics Teacher, Calendar Problem December 29, 2011)
2. Captain Hook’s parrot is 4 times as tall as Peter Pan’s parrot. A parrot owned by another pirate on the Jolly Roger is 5/8 the height of Hook’s bird. The total height of all these birds is 225 cm.

Determine the height of Peter’s Parrot. (Mathematics Teacher, Calendar Problem March 12, 2011)

5. Today, Marcus is as old as his brother, Ben. In 16 years, Marcus will be 5/7 as old as his brother, Ben. How old was Ben when Marcus was born?

**Look Back**

Look at how you solved (or expressed) each of the scenarios above. Is there another way you could have solved the problem?

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|  | **Brief description of how I solved it**  **(table, guess and check, equation, picture, graph…)** | **Here is another way I could have solved it!** |
| **1** |  |  |
| **2** |  |  |
| **3** |  |  |
| **4** |  |  |
| **5** |  |  |