Exploring Order of Operations with Calculators – Skaffolding Lesson

Board Work: Evaluate: 4 + 2 x 8

* Evaluate by adding first and then doing the multiplication (48)
* Evaluate using a calculator (20)
* How did the calculator come up with 20, what operation did it do first?
* Who is correct? Why? What operation do you do first? Rules?

Try by hand and then check with your calculator:

* 10 – 4 ÷ 2 = 8, What operation do you do first?
* 4 + 15 ÷ 5 = 7
* 7 - 4 – 1 = 2, What operation do you do first?
* 19 + 5 – 11 = 13

Mnemonic - PEMDAS: Please Excuse My Dear Aunt Sally

* What is yours?

Parentheses: Insert parentheses to do that part of the expression first

* (8 + 2) x 10 – 3 = 97
* 8 + 2 x (10 – 3) = 22

Insert parentheses to make the values of each expression equal to 12

* 56 – 40 + 4 = 56 – (40 + 4) = 12
* 3 – 1 x 10 – 4 = (3 – 1) x (10 – 4) = 12

Exponents:

* $10^{2}$ ÷ 4 – 8 = 17
* $5+6^{2}$ x 10 = 365

Homework = Page 25, #8 – 22 Even, 26 – 32 Even, 38, 43 – 55 All Out of 26 points