Problem Set #1 – "The Answers Are … "

Use these problems at the beginning of class. Give each random group of 3 a set of problems with the answers and see if they can determine how the answers are reached. You could also display them on the screen (**Slide 2** from "Types of Division") and have groups refer to them that way.

Students won't know the symbol for the second problem, but they should be able to explain how the answer is reached, and how it is different from the first division problem.

7 ▦ 4 = 1.75 7 ▦ 4 = 1	5 ▦ 3 = 1.667 5 ▦ 3 = 1
12 ▦ 5 = 2.4 12 ▦ 5 = 2	9 ▦ 2 = 4.5 9 ▦ 2 = 4

7 ▦ 4 = 1.75 7 ▦ 4 = 1	5 ▦ 3 = 1.667 5 ▦ 3 = 1
12 ▦ 5 = 2.4 12 ▦ 5 = 2	9 ▦ 2 = 4.5 9 ▦ 2 = 4

Show Slide #3 from "Types of Division"

Review decimal (or real) division and integer division as needed. Enforce the operator for integer division.

Then give the next set of problems (or show Slide #4 from "Types of Division") . Same groups of three, without erasing what is already there. The students will not know the symbol, but get them to describe how the third answer is reached.

7 / 4 = 1.75 7 // 4 = 1 7 ▦ 4 = 3	5 / 3 = 1.667 5 // 3 = 1 5 ▦ 3 = 2
12 / 5 = 2.4 12 // 5 = 2 12 ▦ 5 = 2	9 / 2 = 4.5 9 // 2 = 4 9 ▦ 2 = 1

7 / 4 = 1.75 7 // 4 = 1 7 ▦ 4 = 3	5 / 3 = 1.667 5 // 3 = 1 5 ▦ 3 = 2
12 / 5 = 2.4 12 // 5 = 2 12 ▦ 5 = 2	9 / 2 = 4.5 9 // 2 = 4 9 ▦ 2 = 1

Show Slide #5 and #6 from "Types of Division"

Review modulo division. Enforce the operator for modulo division. The last slide gives applications of modulo division.

Then give the next set of problems (or show Slide #7, #9, #11 from "Types of Division"). Same groups of three. They can erase their white boards, or leave the problems; either way.

Given: **number % 10** What are the possible answers?	Given: **number % 5** What are the possible answers?
Given: **number % 3** What are the possible answers?	Evaluate: **10 // 7 =** **10 % 7 =**
Evaluate: **10 // 3 =** **10 % 3 =**	Evaluate: **10 // 4 =** **10 % 4 =**
Evaluate: **10 // 5 =** **10 % 5 =**	Evaluate: **4 // 5 =** **4 % 5 =**