# Module 2 Ratio, Proportion and Mathematical Representations

### **Student Work Samples**

The ratio of boys to girls in a class is 5 to 3. After six girls join the class, the number of boys and girls in the class is the same. How many students are in the class now?

#### Student #1

Student #2

I took 5 and multiplied it by 2 which gives me 10 then I added b (the number of new girls) to it and it gives me 16, the number of Students in the class is 32, 16 girls & 16 boys.

# in class	в	6
8	S	з
16	10	6
24	15	9
32	20	12
40	25	IS
48	30	18
# of girls plus 6 which will egoal the # of boys	57	3+6 6+6 9+6

Student #3

 $5\frac{5}{8} = boys + 6 gil$   $5\frac{5}{8} + \frac{3}{8} = \frac{8}{8}$   $50\frac{5}{8} = \frac{3}{8} + 6$   $5\frac{5}{8} + 6 = A$   $4\frac{5}{8}\frac{5}{8} = \frac{3}{8}$  J don't know

Student #4



#### Student #5



Student #6



# **Proportional Situations and Graphs**



Solve the above problems. Record your solution strategy and discuss the following:

- Of the above problems, which are proportion problems and which are not? Briefly justify your answers.
- How do you graph each situation?

## **Student Work Samples**

**Consider Student Work Samples** 

- What mathematics does each student know?
- What are the themes emerged from the samples below?
- What do we learn about each child based on their responses?



## Student Work Sample #2

6 P=1+table Sal Will need 9 tables to sear 50 People. There would be 4 sears 12P=2 tables 18 9 = 3 tables 240 4 tables 30 1 = 5 tables left over 31 368= 6 tables 7 tables 489: 8 tables 50 P = 9 tables

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## Student Work Sample #4



=17.4=21+4=25=4= -14 4-15-50 0 4 He will need 12 tables.



Student Work Sample #7

