Problem Solving using Equations Gallery Walk

This activity will have three stations. First, the group will solve a teacher written problem. They will leave their answer at the station and rotate. At the next station, the group will critique the work that was left for them and then write a question about the situation, (such as "What if Gary charged $2.50 per window? How would that change the result?). At the last station, the group will answer the question left for them. After the students have gone through all 3 stages of the activity, the teacher should facilitate a discussion to debrief the activity. Guiding questions could include:

- What commonalities did you observe between the 3 problems?
- Were the problems solved in similar ways? If so, how were they similar? If not, how were they different?
- Did you see a great variety of techniques for addressing the problem? How can you account for the variety of techniques in solution processes?

Here are three possible problems.

Gary is washing windows to raise money to buy a new cellphone. He gets paid $5.25 for every 3 windows he washes. If the cellphone costs $195 and he already has $42.37 saved, how many windows will he have to wash in order to have enough money?

Roberto is ordering lunch. He wants to order a large fry for $1.85, and a medium soda for $1.15. Chicken wings cost 1.25 for every 3 wings. If he has $7.00, how many chicken wings can he buy?

Harold is ordering pizza and breadsticks. Breadsticks cost $3.25 for 4 sticks and pizza is $9.50 plus $1.50 for each topping. He has a coupon for 15% off if he buys 2 or more toppings. If he only has $16 to spend, how many toppings can he get?

1. Solve the following problem by writing an equation that represents the situation. Be sure to show all of your work and explain how you got your answer.

2. Do you agree with the solution to question 1?

YES - a. Did they solve the problem the same way you would have? If not, show how you would solve the problem.

NO – a. Show how you solved the equation and explain why your solution is correct and the previous group is incorrect.

2. Write a question about the situation for the next group to answer.

3. Answer the new question.

Discussion.

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Observation Checklist

Objectives:

1. *Students write and solve equations to represent real-world situations*
2. *Students generate questions to extend the thinking about problems.*
3. *Students critique the work of other students.*

Coding:
I=Student needs instruction and cannot yet achieve this objective.
P=Student needs more practice on this objective, but is beginning to understand.
A=Student is ready to apply this objective to various situations.

	Objective #1			***Objective #2***			***Objective #3***		
Student	***I***	***P***	***A***	***I***	***P***	***A***	***I***	***P***	***A***
Comments									
Comments									
Comments									
Comments									
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