(A) Lesson Context

BIG PICTURE of this UNIT:	• mastery with algebraic manipulations/calculations involving linear relations • proficiency in working with graphic and numeric representations of lines • understanding basics of function concepts and apply them to lines		
CONTEXT of this LESSON:	Where we've been Grade 8 math & working with linear relations	Where we are Graphs & algebra of linear functions	Where we are heading Mastery of working with A/G/N representations of $y = mx + b$

(B) Lesson Objectives

a. Work with multi methods for solving problem ➔ Begonia Question
b. Work with Problem Solving Strategies ➔ The Banana Problem

(C) The Begonia Question ➔ Alan can plant 1 flat of begonias in $\frac{3}{4}$ hour. If he plants begonias for his entire shift of 6 hours, how many flats does he plant?

Your TASK:

a. INDIVIDUALLY, see if you can come up with an answer. ANY method of solving this question is fine

b. With a PARTNER, check your understanding of the problem & each other's answers

c. In a GROUP, once you agree on a correct answer, record as many DIFFERENT METHODS that can be used to come up with the answer

(D)The Banana Problem

Please work in your groups to solve this problem. Show your work with pictures, charts, tables, algebra, equations, etc ...

The Problem…

There is a Camel on the edge of a desert that is **1000 km** wide. Beside the camel is a pile of **3000 bananas**. The camel can carry **at most** 1000 bananas at a time. For **every km** it walks it has to **eat one banana**.

What is **the largest amount of bananas** the camel can end up with on **the other side of the desert?**

Important hints!!

- The camel can walk **back and forth** as many times as needed.
- The camel can **drop bananas off** at any point along the way, to get later.

Solution

- Please present your solution as clearly as possible on a separate sheet of paper. Again, pictures, charts, and tables are the key. I should not only see your numerical answer, but also the visual representation of your thinking and process.

Extension Questions to Ponder

- How do you know if your solution is the "correct" answer?
- Are there other ways to find a solution to this?
- How does the problem change if you have 6000 bananas and the desert is 2000 km wide?

(E) Homework (example of flipped classroom)

(1) Watch this video from Khan Academy and then complete Q1,5abc (green), Q6ac (blue), 7bd (black) on this worksheet

(2) Watch this second video from Khan Academy if you have problems with Q1 & 5