# Monday, March 11, 2019

a = amount charged per bike

estimated sales:
70,000 – 200a

expenses:
$110 to make each bike
$700,000 in operating costs

- Warm-up
  - Simplify the given equation to model bicycle sales:
    P(a) = a(70,000 – 200a) – 700,000 + 110(70,000-200a)
  - Graph this equation in the calculator & sketch the graph to determine break even points (where no money is lost or gained) AND maximum profit available
- PBL Work

**Objectives**

**Content**: I will apply quadratic reasoning to the PBL problem.

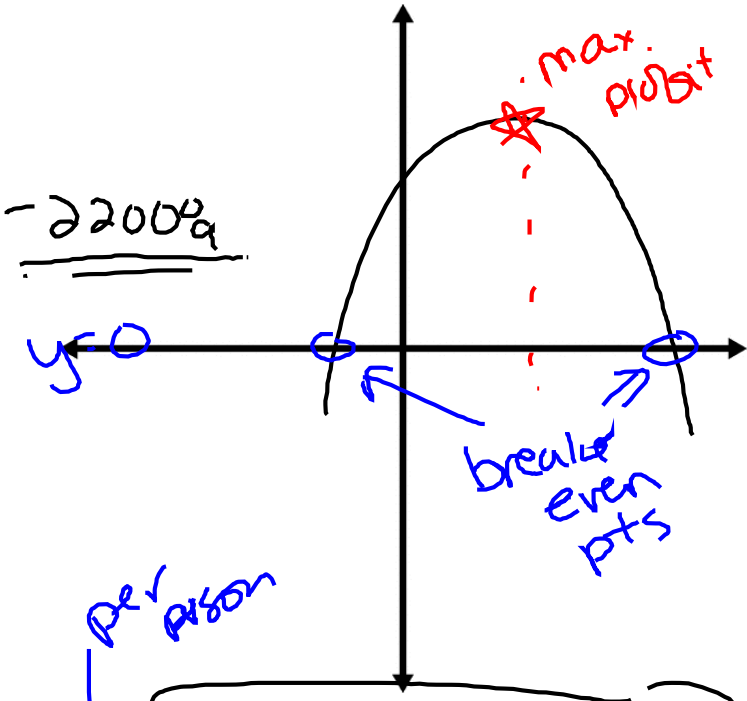
**Social**: I will work well with my group, contributing or doing my job.

**Language**: I will extract information from the spreadsheets and identify it with correct vocabulary to build the needed equation.

# Profit Functions

$70{,}000a - 200a^2 - 700{,}000 + 7{,}700{,}000 - 2200a$

$-200a^2 + 48000a + 7000{,}000$




- Simplify the given equation to model bicycle sales:
  $P(a) = a(70{,}000 - 200a) - 700{,}000 + 110(70{,}000 - 200a)$
- Graph this equation in the calculator & sketch the graph to determine break even points (where no money is lost or gained) AND maximum profit available

per person

a = amount charged per bike

?

estimated sales:
70,000 – 200a

expenses:
$110 to make each bike
$700,000 in operating costs

**Objectives**

**Content**: I will apply quadratic reasoning to the PBL problem.

**Social**: I will work well with my group, contributing or doing my job.

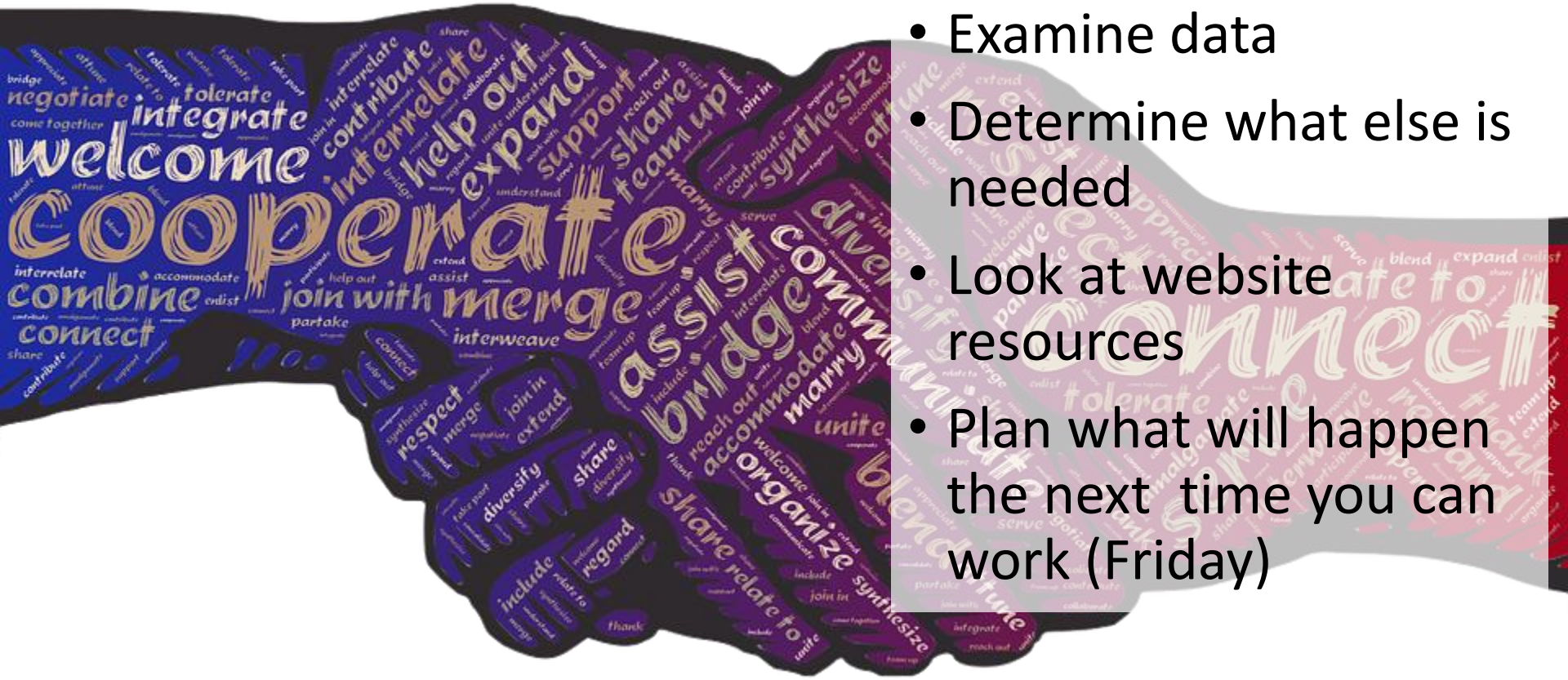
**Language**: I will extract information from the spreadsheets and identify it with correct vocabulary to build the needed equation.

Math 1-2

# PBL Work

## Goals

- Clarify lenses
- Examine data
- Determine what else is needed
- Look at website resources
- Plan what will happen the next time you can work (Friday)




**Objectives**

**Content**: I will apply quadratic reasoning to the PBL problem.

**Social**: I will work well with my group, contributing or doing my job.

**Language**: I will extract information from the spreadsheets and identify it with correct vocabulary to build the needed equation.