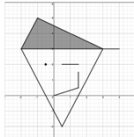## Slide 1

Pig Pens & Helicopters

To Write Equations and Draw Graphs

Grades 6-8

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1

Slide 2

Pig Pen

2

Slide 3

Pig Pen

Pig Pen Algebra

Farmer John is making a pig pen. He is short on materials so he is making the pen out of bales of hay. These bales are shaped as cubes. Farmer John likes to keep things simple, so whenever he gets another pig, he just extends the pen as shown below. Your job is to help Farmer John write a formula to tell him how many bales of hay he will need for a given number of pigs.

3

Slide 4

Pig Pen

4. Without anymore drawings, complete the chart below for P number of pigs and B number of bales.

P (pigs)	1	2	3	4	5	6	7	8	9	10	20	50
B (bales)	8	10	12	14	16	18	20	22	24	26	28	30

4

Slide 5

Pig Pen

7. Write an equation that represents the number of bales B needed to pen P number of pigs.

5

Slide 6

Pig Pen

8. Show how to use your new equation to find how many bales are needed for 100 pigs.

9. How many pigs could be penned by 96 bales of hay?

$B = 2P + 6$
$96 = 2P + 6$
$90 = 2P$
$45 = P$
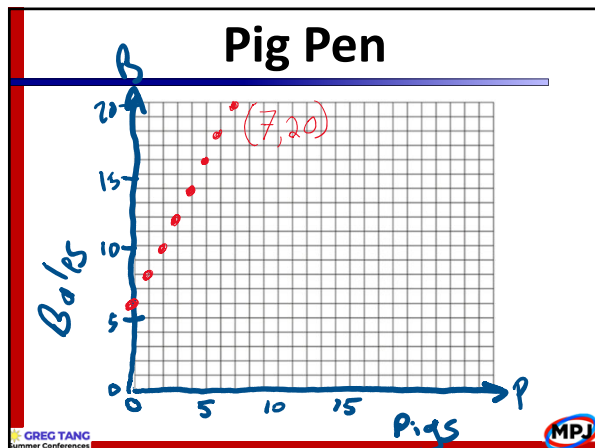 45 bales

$B = 2P + 6$
$B = 2(100) + 6$
$B = 200 + 6$
$B = 206$
  206 pigs
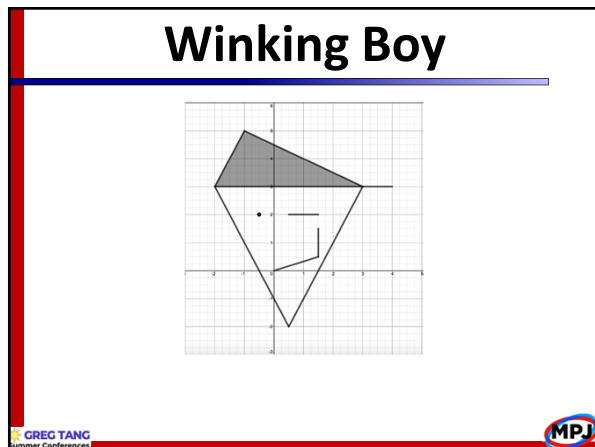
6

1

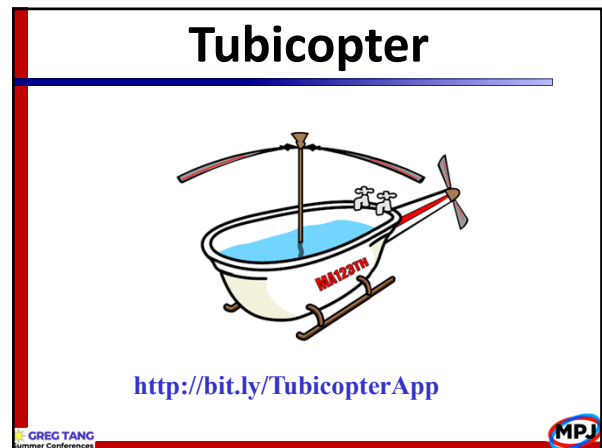## Pig Pen

Tubicopter

http://bit.ly/TubicopterApp

Winking Boy

Use Pig Pens, Helicopters and Winking Boys

10%

ACT NOW

2-Week Rule
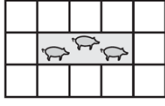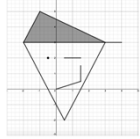
Use Pig Pens, Helicopters and Winking Boys

…with the faith that they can learn it, and that we can teach it to them,

…so you can change this world, one math lesson at a time.