Alg 1 Friday Week 9 Warm-Up

Write an equation that represents each sentence.

1. y is 5 less than the product of 4 and x.

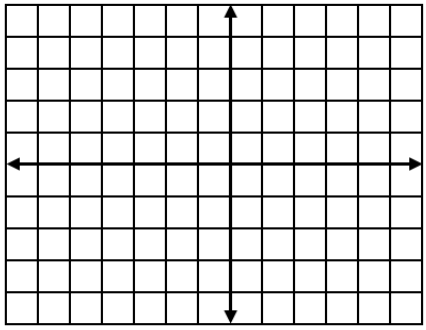
2. 7 less than three fifths of *b* is *a.*

3. A team of divers assembles at an elevation of -10 ft relative to the surface of the water. Then the team dives at a rate of -50 ft/min. Write a rule that represents the team's depth *d* as a function of *t.* What is the team's depth after 3 minutes?

Complete the charts and SHOW YOUR WORK. Then graph the results.

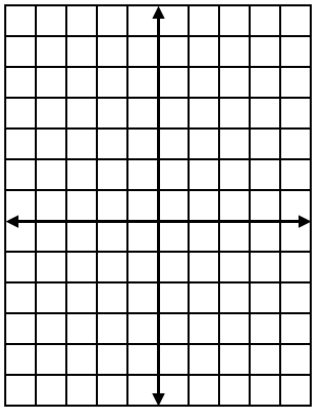
4. $y = -|x+2|$

x	y
-4	
-3	
-2	
-1	
0	



5. $y = x^2 - 1$

x	y



6. Which word goes with each problem? DO NOT SOLVE, just decide the word:

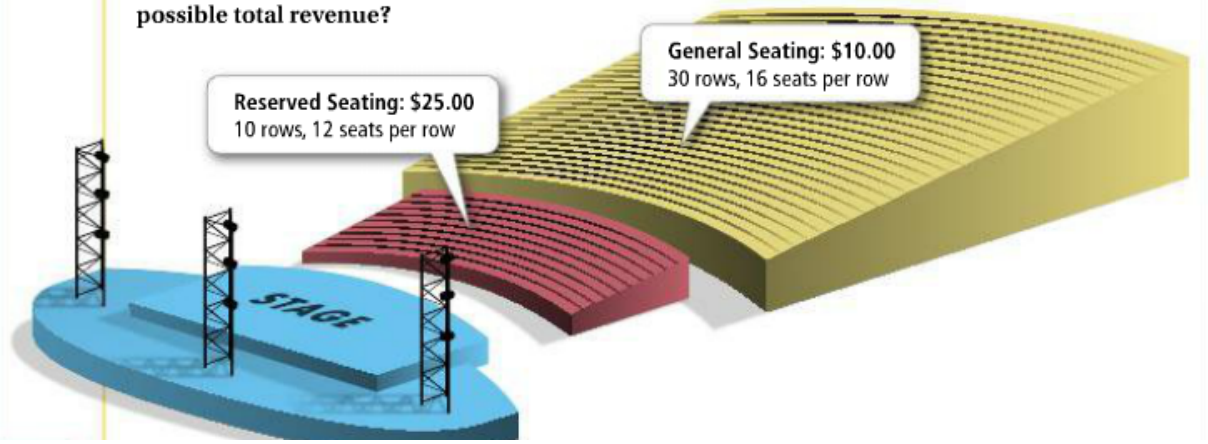
a) $|3x+2| < 3$ b) $|2x-1| = 8$ c) $-3|x+2| \leq -9$

careful!

4-5 Writing a Function Rule

Problem 2 **Writing and Evaluating a Function Rule**

Concert Revenue **A concert seating plan is shown below. Reserved seating is sold out. Total revenue from ticket sales will depend on the number of general-seating tickets sold. Write a function rule to represent this situation. What is the maximum possible total revenue?**



Got It? **2. a.** A kennel charges $15 per day to board dogs. Upon arrival, each dog must have a flea bath that costs $12. Write a function rule for the total cost for n days of boarding plus a bath. How much does a 10-day stay cost?

more

b. Reasoning Does a 5-day stay cost half as much as a 10-day stay? Explain.

Problem 3 Writing a Nonlinear Function Rule

Geometry Write a function rule for the area of a rectangle whose length is 5 ft more than its width. What is the area of the rectangle when its width is 9 ft?

HW p 265: 9, 11, 13, 16

+ Graphing Handout

Write a function rule that represents each sentence.

9. C is 8 more than half of n.

11. 2.5 more than the quotient of h and 3 is w.

Write a function rule that represents each situation.

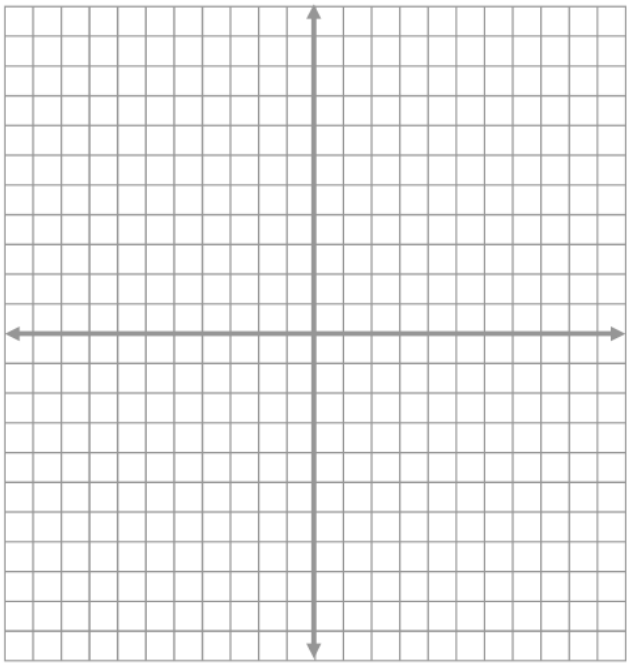
13. Pizza The price p of a pizza is \$6.95 plus \$.95 for each topping t on the pizza.

16. Aviation A helicopter hovers 40 ft above the ground. Then the helicopter climbs at a rate of 21 ft/s. Write a rule that represents the helicopter's height h above the ground as a function of time t. What is the helicopter's height after 45 s?

need help? see problem 2 from notes

HW: Fri wk 9

x	$y = x^2 - 3$	y



x	$y = -\lvert 2x - 1 \rvert$	y