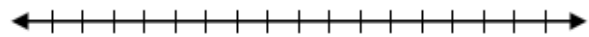Skill 3: Solve and Graph Compound Inequalities on a Number Line
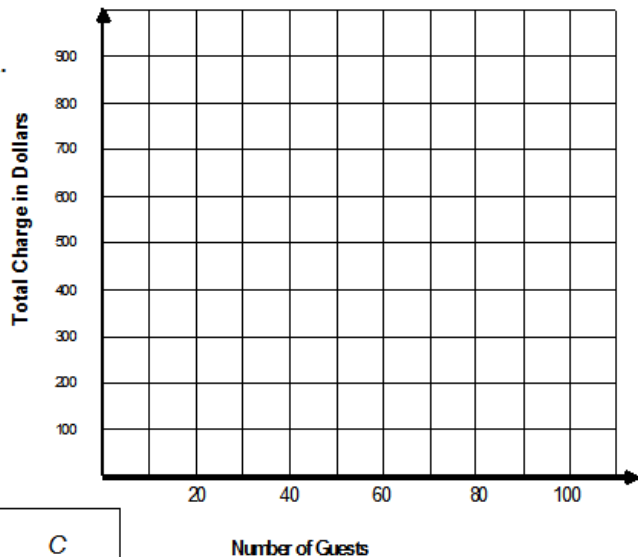
$$-3(5x-6)+12 > -4-(2x+5)$$

Skill 4: Solve and Graph Absolute Value Inequalities and Equations

$$|-2x+2| > 10$$

Skill 5: Evaluate and Graph a Function

A catering company charges $8.00 per guest and a flat rate of $100.00 to cater a luncheon. The function that represents this situation is $C(g) = 8g + 100$, where C represents the total charge in dollars and g represents the number of guests.

Use the function to graph the total charge over the number of people for up to 100 people.

g	$C(g) = 8g + 100$	C
0		
20		
50		
80		
100		

Use your graph to estimate the number of guests if the total charge is $600

5-1 Rate of Change and Slope

Problem 3 **Finding Slope Using Points**

What is the slope of the line through $(-1, 0)$ and $(3, -2)$?

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

Got It?

What is the slope of the line through each of these pairs of points?

1.   (1, 3) and (4, -1)   2.   (-3, 2) and (1, 5)

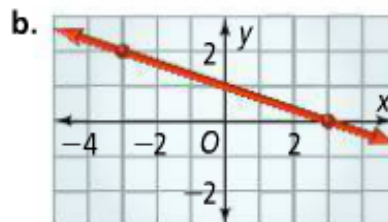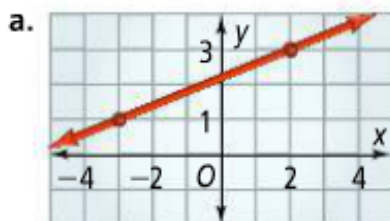**Problem 1** **Finding Rate of Change Using a Table**

Marching Band The table shows the distance a band marches over time. Is the rate of change in distance with respect to time constant? What does the rate of change represent?

Distance Marched

Time (min)	Distance (ft)
1	260
2	520
3	780
4	1040

Problem 2 **Finding Slope Using a Graph**

2. What is the slope of each line in parts (a) and (b)?

a.

b.

Assessments

PT: week 10
 Skill Test 3.3,4.3,5.1 & 2.6 if needed
Quiz Ch 3/4 #2
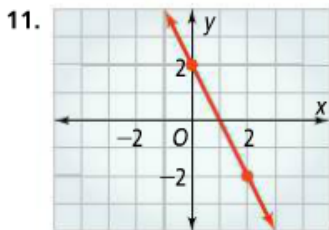
HW: p 298: 9-21 odd

Determine whether each rate of change is constant. If it is, find the rate of change and explain what it represents.   ◀ **See Problem 1.**
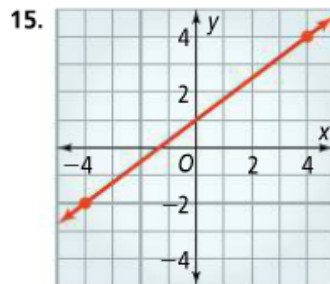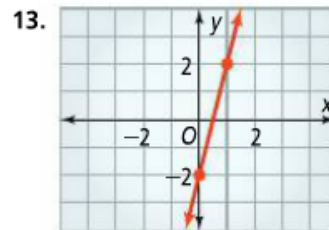
9. **Hot Dogs and Buns**

Hot Dogs	Buns
1	1
2	2
3	3
4	4

Find the slope of each line.   ◀ **See Problem 2.**

11.

13.

15.

Find the slope of the line that passes through each pair of points.   ◀ **See Problem 3.**

17. $(0, 0), (3, 3)$ **19.** $(4, 4), (5, 3)$

21. $(-6, 1), (4, 8)$