Name: Period:

First Score:	First attempt due:	Final Score:
	Final corrections due:	

Practice:
Slopes of Linear Functions

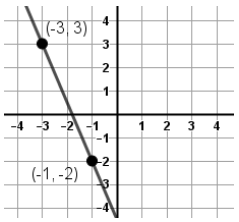
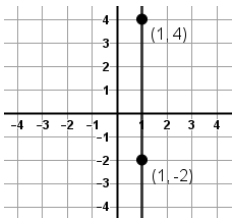
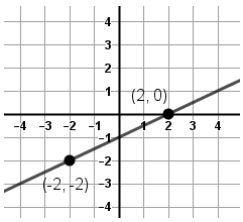
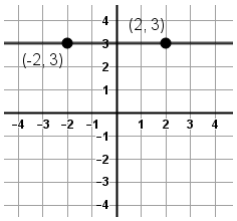
Find the slope of the line passing through the given points. Show work and give answers as reduced fractions.

1] Line A: $(2,1), (6,9)$	2] Line B: $(1,1), (2,-5)$	3] Line C: $(-3,-2), (6,1)$
4] Line D: $(3,-2), (-1,7)$	5] Line E: $(0,5), (2,-1)$	6] Line F: $(3,-4), (7,2)$

7] Place the lines from exercises 1-6 in order from **LEAST steep to MOST steep**. Write the **LETTER** of the line, not the slope of the line on the blanks below.

Line _____	Line _____	Line _____	Line _____	Line _____	Line _____

First find the slope and then use it to determine if the line is rising, falling, horizontal, or vertical.

8]  $m =$ _____ which means this line is _____.	9]  $m =$ _____ which means this line is _____.	10]  $m =$ _____ which means this line is _____.	11]  $m =$ _____ which means this line is _____.
12] $5 - y = 7 + \frac{2}{3}x$ $m =$ _____ which means this line is _____.	13] $2x + 3y = 4x + 3y$ $m =$ _____ which means this line is _____.	14] $3y + 6 = 12x$ $m =$ _____ which means this line is _____.	15] $4(2 - y) = 12$ $m =$ _____ which means this line is _____.
16] $2y = \frac{2}{3}x - 14$ $m =$ _____ which means this line is _____.	17] $6(x + 2y) = 9y$ $m =$ _____ which means this line is _____.	18] $3x + 6 = 12$ $m =$ _____ which means this line is _____.	19] $\frac{1}{4}(x + 2y) = \frac{5}{4}(x + 8)$ $m =$ _____ which means this line is _____.

Find the slope of each line and use the slopes to classify the relationship between the lines as parallel, perpendicular, coinciding, or intersecting at a non-right angle. Show work to support your answer.

20] Line A: $y = -\frac{2}{3}x + 3$ Line B: $2y + 3x = 6$	21] Line A: $4x = \frac{1}{2}(x + 14)$ Line B: $2(x - 8y) = 3 - 16y$	22] Line A: $y = -4x + 1$ Line B: $2x - 8y = 4$
23] Line A: $y = \frac{3}{4}x + 1$ Line B: $4 - 3x + 4y = 0$	24] Line A: $y = 5y - 10$ Line B: $2x - 8x = 18$	25] Line A: $y = \frac{3}{4}x + 1$ Line B: $3x - 4y = -4$

Create two ordered pairs using the given information and use them to solve the problem by finding the rate of change. Show work to support your answer and include units.

26] On Friday, you left for a weekend camping trip with 110 miles on the odometer and 14.5 gallons of gas in the tank of your car. When you returned on Sunday, the odometer read 299 miles and you still had 7.5 gallons of gas left. What was the fuel efficiency of your car (in miles per gallon) on this trip?

27] When you started your shift at 7 am, 120 steel valves had already been machined and were ready for assembly. At 3pm, your shift ended and 424 steel valves were now completed and ready for assembly. The target production rate is 36 steel valves per hour. What was the production rate for your shift? Would your supervisor be satisfied with the pace of your work?