

Name: \_\_\_\_\_

UNIT 4 QUIZ 2 STUDY GUIDE  
SLOPE-INTERCEPT AND POINT-SLOPE FORM

1. Slope intercept form: \_\_\_\_\_ Point-Slope Form: \_\_\_\_\_

2. Write an equation of the line in **slope-intercept form** with a slope of  $-\frac{2}{5}$  and point (0, -3).

3. Write the equation of the line in **slope-intercept form** that passes through (3, -5) with a slope of -5.

4. Write the equation of the line in **slope-intercept form** that passes through the points  $f(2) = -10$  and  $f(4) = -4$ .

5. Write an equation of the line that has an x-intercept of 4 and a y-intercept of -2 in **slope-intercept form**.

6. Write an equation in **point-slope form** of the line that passes through the point (4, -5) and has a slope of  $\frac{3}{2}$ .

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7. Write an equation in **point-slope form** of the line that passes through the points: (-1, 4) and (2, 8)

7. Write an equation of the line that passes through the point (8, -3) and has a slope of  $\frac{3}{2}$ .

a. Write first in **point-slope**:

b. Now rearrange into **slope-intercept**:

8. Write an equation of the line that passes through the points: (-12, 5) and (-6, 2)

a. Write first in **point-slope**:

b. Now rearrange into **slope-intercept**:

9. Write an equation for the linear function  $f$  with the given values.  $f(-1) = 7$ ,  $f(3) = 3$

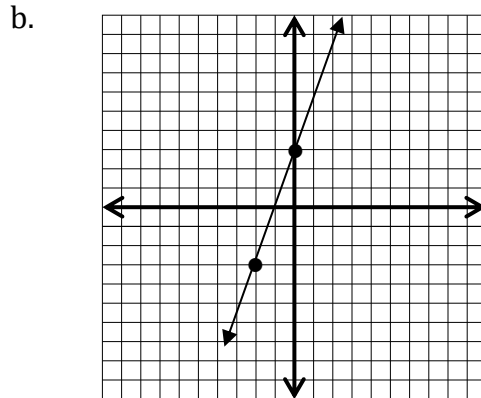
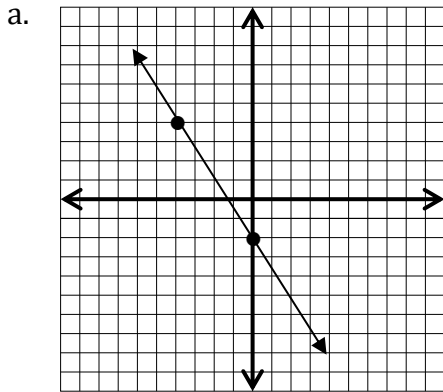
a. Write first in **point-slope**:

b. Now rearrange into **slope-intercept**:

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10. Write an equation of the line has a zero slope and that passes through the point: (3, -5)  
(Hint, this is neither slope intercept OR point slope ☺. sketch a graph!)

11. Write an equation of the line shown.



**Slope-Intercept:**

**Point-Slope:**

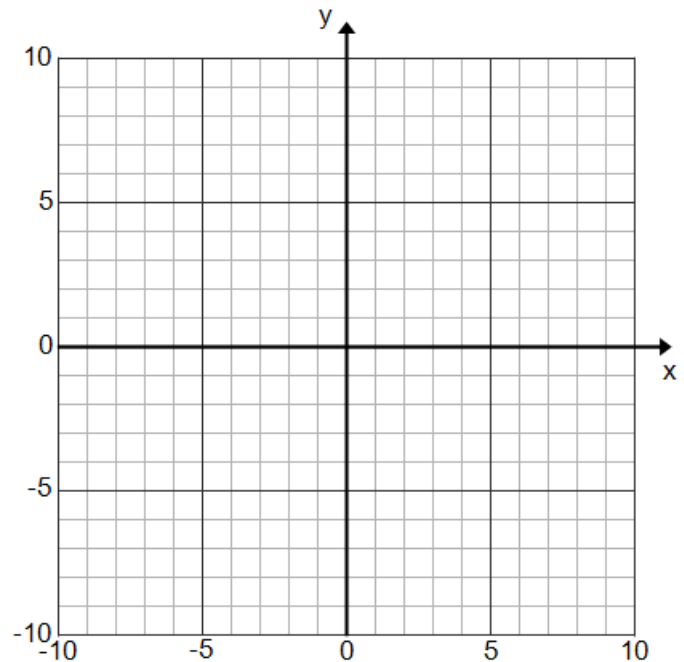
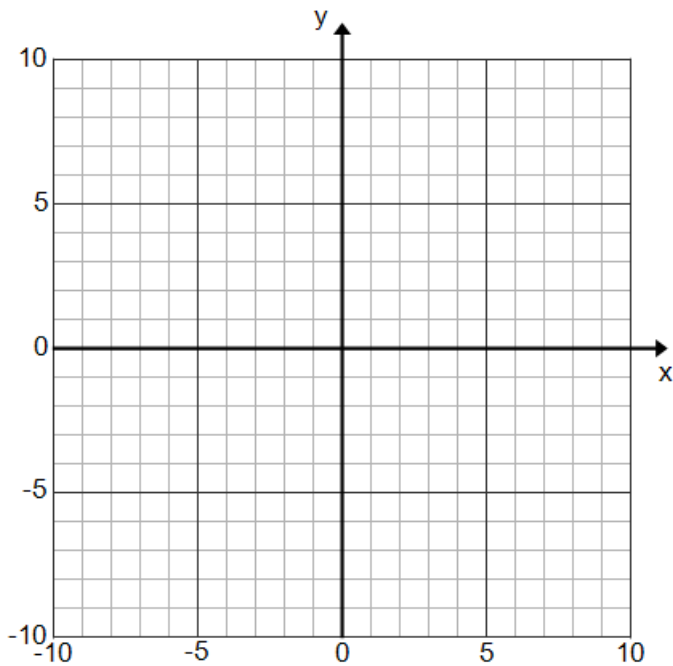
12. Graph using **point-slope** form.

a.  $y - 5 = -\frac{2}{3}(x + 6)$

b.  $y + 3 = 2(x + 1)$

Point: \_\_\_\_\_ Slope: \_\_\_\_\_

Point: \_\_\_\_\_ Slope: \_\_\_\_\_



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13. You are saving up to buy your dream car, a \_\_\_\_\_. You start with \$400 in your bank account. With your part-time job, you are bringing in around \$50 a week.

A) Write an equation in SLOPE-INTERCEPT form that represents this situation.

B) Define your variables.

C) Congrats! You have \$2,000 in your bank account. How many weeks have you been saving?

14. Blue Berry is in a pie eating contest. After 5 minutes, she has consumed 2 pies. After 10 minutes, she has consumed 9 pies.

A) Write an equation in POINT-SLOPE form that represents this situation.

B) Define your variables.

C) Rewrite your equation in slope-intercept form.

D) After 20 minutes, how many pies has Blue consumed?