

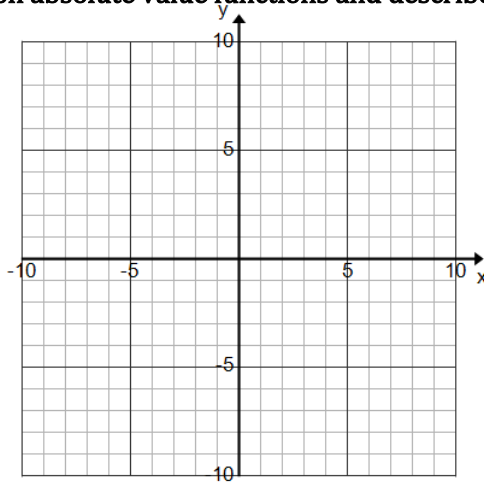
QUARTER 3 STUDY GUIDE

NAME: _____

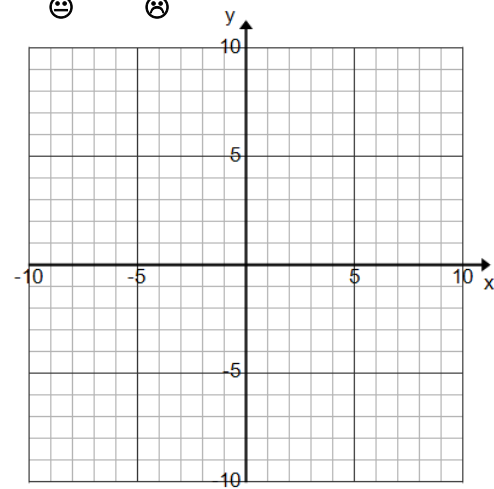
UNIT 3 PART III

✓ Objective: Graph absolute value functions and describe the transformations. ☺ ☹ ☒

1. Graph $y = |x|$



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



(3-5) Describe the transformation from the graph $y = |x|$.

3. $y = |x| + 5$

4. $y = -|x + 9|$

5. $y = |-x| - 12$

(6-7) Write the equation to represent the graph described.

6. The absolute value graph is shifted 3 units to the right.

7. The absolute value graph is reflected over the y-axis and shifted up 6 units.

UNIT 4

✓ Objective: Write an equation in Slope-Intercept Form: $y = mx + b$ ☺ ☹ ☒

8. $m = \frac{3}{2}$ and point (0, -5)

9. $f(-6) = 2$ and $f(-2) = -10$

✓ Objective: Write an equation in Point-Slope Form: $y - y_1 = m(x - x_1)$ ☺ ☹ ☒

10. $m = -4$ and point (-2, -5)

11. Points (4, 7) and (-3, -6)

✓ Objective: Write an equation in Standard Form: $Ax + By = C$ ☺ ☹ ☹

12. $y - 3 = -7(2x - 3)$

13. Points $(-2, 2)$ and $(-4, -6)$

✓ Objective: Writing Equations of Parallel and Perpendicular Lines. ☺ ☹ ☹

14. Are the two lines parallel, perpendicular, or neither?

$$y = -5x + 3$$

$$-2y = -10x + 20$$

15. Write an equation in slope-intercept form that is perpendicular to $y = \frac{-1}{2}x + 1$ and goes through $(-1, 4)$.

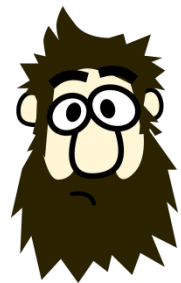
✓ Objective: Solve Linear Application Problems. ☺ ☹ ☹

16. Corey Crawford's beard grows at a rate of 3 centimeters per week. He started with a beard that was 2.5 centimeters long.

a) Define the variables

b) Write the equation in slope-intercept form.

c) How long will Corey's beard be after 2 months (8 weeks)?



17. Miss Palumbo travels to Japan over Spring Break to visit friends and brings her amazing camera along to capture great memories! On day 3 of the trip, she took 46 pictures. On day 7, she took 98 pictures.

a) Define the variables.

b) Write an equation in point-slope form

c) How many days was she in Japan if she took 163 pictures?



18. Mr. Wader Melen decides to shop at Whole Foods for some healthy snacks. Oranges cost \$3 and an apple cost \$2. Mr. Melen spent \$45 at the store.

a) Define the variables.

b) Write an equation in standard form

c) If Mr. Melen buys 11 oranges, how many apples does he buy?



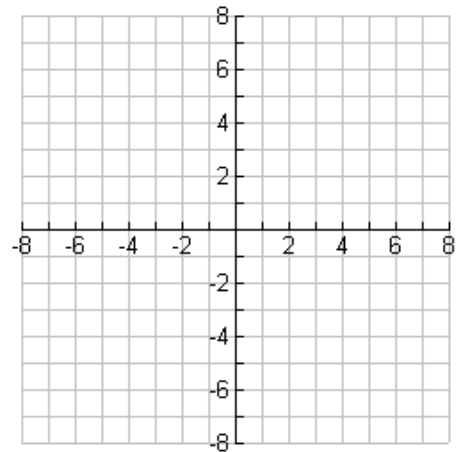
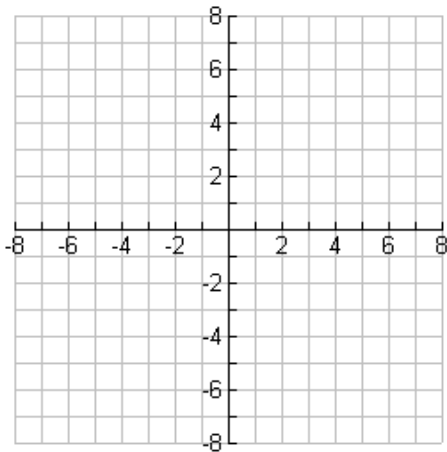
✓ Objective: Graph from slope-intercept form, point-slope form, or using intercepts. ☺ ☹ ☹

19. $y = -\frac{3}{2}x - 3$

20. $-4x + y = 6$

m = _____ b = _____

m = _____ b = _____

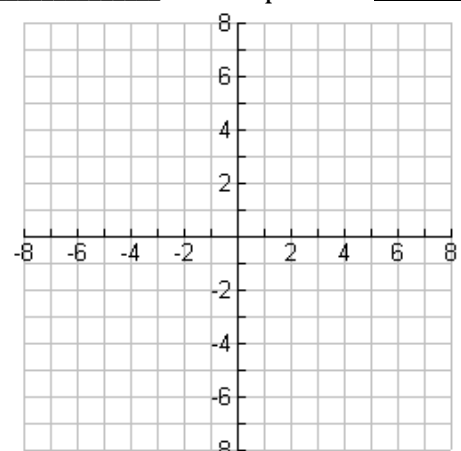
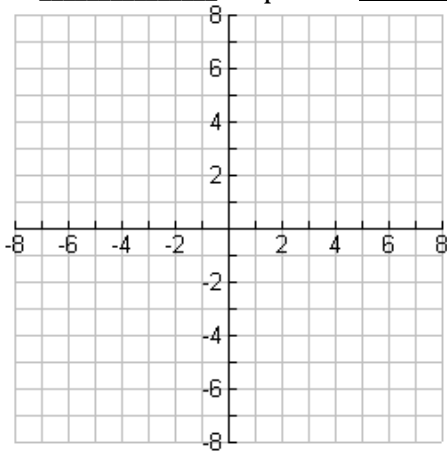


21. $y + 3 = -\frac{3}{4}(x - 5)$

22. $y - 5 = -3(x - 6)$

m = _____ point = _____

m = _____ point = _____



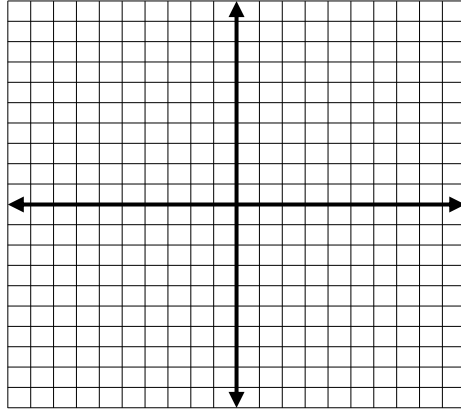
UNIT 5

- ✓ **Objective: Solve a system by graphing.** ☺ ☹ ☹

Solve the system by graphing.

$$x + y = -2$$

$$y = 4x + 3$$



- ✓ **Objective: Solve a system by substitution.** ☺ ☹ ☹

$$-5x + y = -3$$

$$3x - 8y = 24$$

- Objective: Solve a system by elimination.** ☺ ☹ ☹

$$-4x + 9y = 9$$

$$x - 3y = -6$$

- ✓ **Objective: Solve special cases of systems.** ☺ ☹ ☹

$$-4x - 20y = -17$$

$$x + 5y = -1$$

SELF-REFLECT: What was the EASIEST part of this study guide?? What was the most CHALLENGING?! What are you going to do to study for the Quarter 3 Exam???