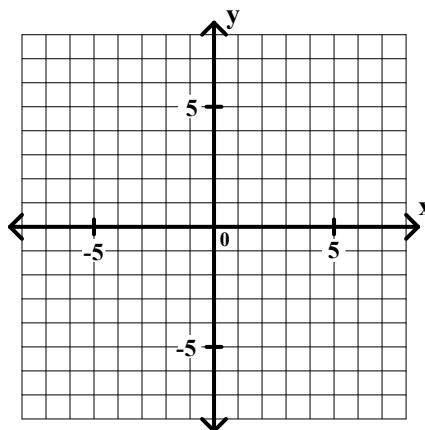


## General Algebra II Worksheet #5 Unit 2 page 1

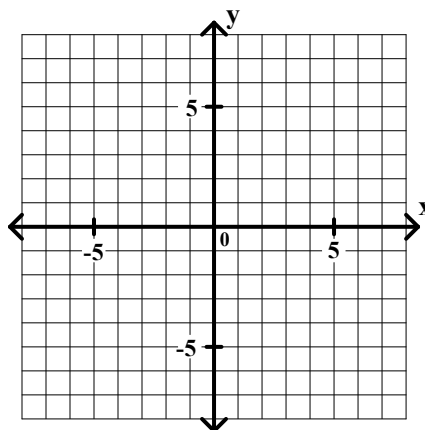
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**Objective:** Given the equation of a line and a point not on the line, the students will be able to find the equation of the line through the given point that is parallel to the given line. Find the equation of the line being described in each problem. If the line is oblique, then write its slope-intercept form. Graph both equations (the given equation as well as your solution).

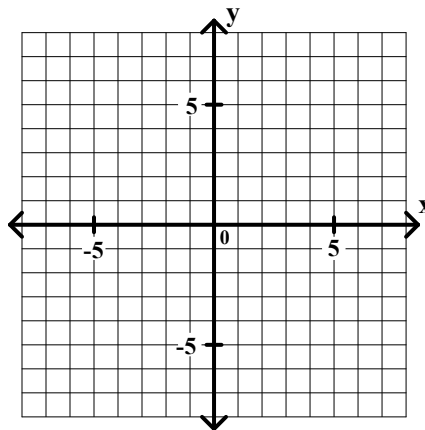
1. The line through  $(0, -3)$  that is parallel to  $2x + 3y = 6$
- 



2. The line through  $(0, 2)$  that is parallel to  $3x + 5y = -5$
- 



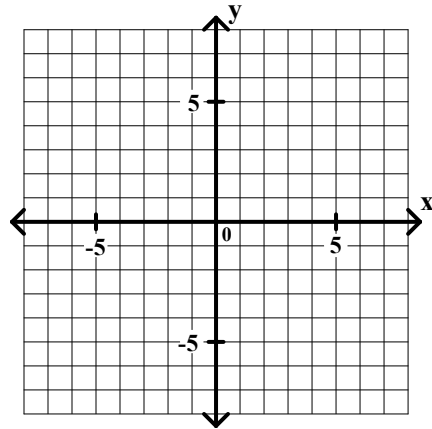
3. The line through  $(-2, 1)$  that is parallel to  $x = 3$
- 



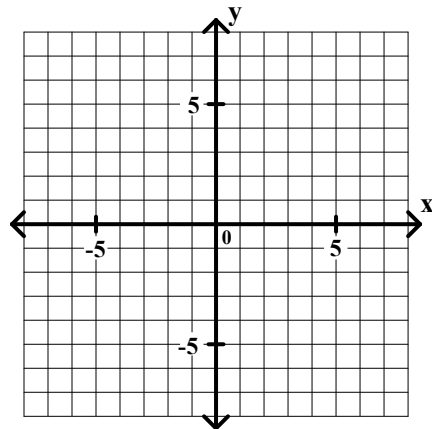
## General Algebra II Worksheet #5 Unit 2 page 2

**Objective:** Given the equation of a line and a point not on the line, the students will be able to find the equation of the line through the given point that is parallel to the given line. Find the equation of the line being described in each problem. If the line is oblique, then write its slope-intercept form. Graph both equations (the given equation as well as your solution).

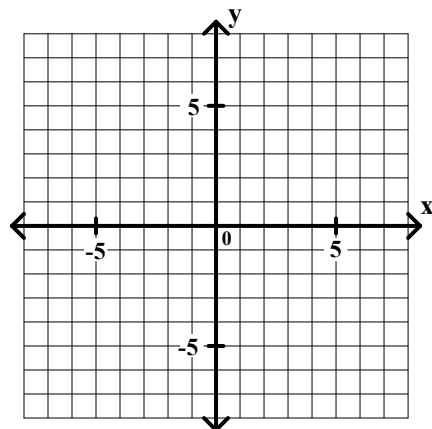
4. The line through (5, -2) that is parallel to  $y = 4$  \_\_\_\_\_



5. The line through (-3, -5) that is parallel to  $3x + 4y = -4$  \_\_\_\_\_



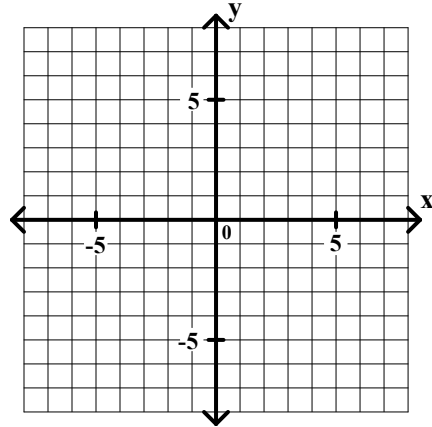
6. The line through (4, 3) that is parallel to  $x - 2y = 8$  \_\_\_\_\_



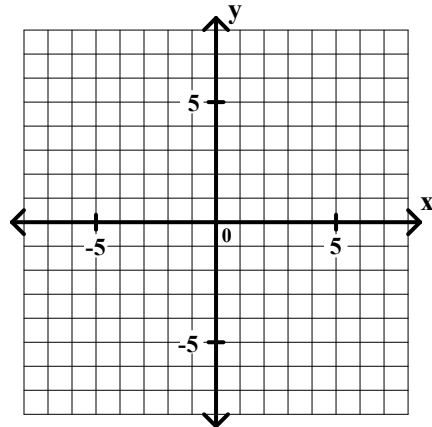
## General Algebra II Worksheet #5 Unit 2 page 3

**Objective:** Given the equation of a line and a point not on the line, the students will be able to find the equation of the line through the given point that is perpendicular to the given line. Find the equation of the line being described in each problem. If the line is oblique, then write its slope-intercept form. Graph both equations (the given equation as well as your solution).

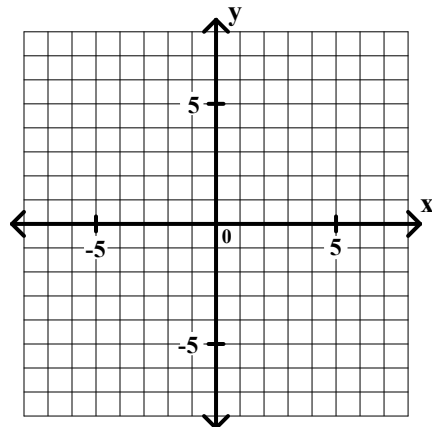
7. The line through  $(0, -3)$  that is perpendicular to  $2x + 3y = 6$  \_\_\_\_\_



8. The line through  $(0, 2)$  that is perpendicular to  $3x + 5y = -5$  \_\_\_\_\_



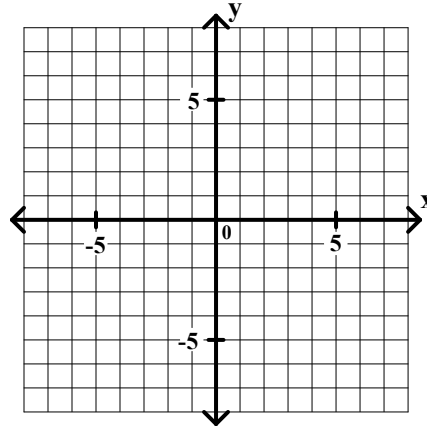
9. The line through  $(-2, 1)$  that is perpendicular to  $x = 3$  \_\_\_\_\_



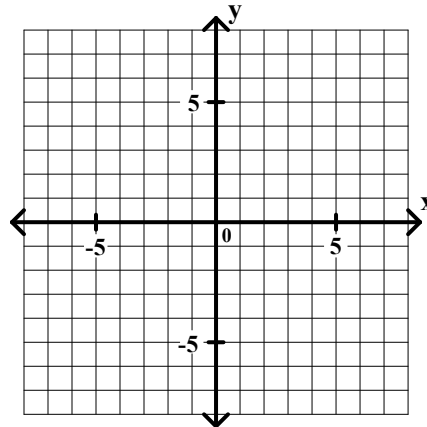
## General Algebra II Worksheet #5 Unit 2 page 4

**Objective:** Given the equation of a line and a point not on the line, the students will be able to find the equation of the line through the given point that is perpendicular to the given line. Find the equation of the line being described in each problem. If the line is oblique, then write its slope-intercept form. Graph both equations (the given equation as well as your solution).

10. The line through  $(5, -2)$  that is perpendicular to  $y = 4$  \_\_\_\_\_



11. The line through  $(-3, -5)$  that is perpendicular to  $3x + 4y = -4$  \_\_\_\_\_



12. The line through  $(4, 3)$  that is perpendicular to  $x - 2y = 8$  \_\_\_\_\_

