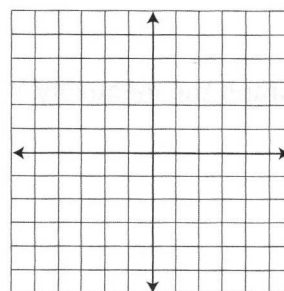Fill in the blank.

1. Two lines that are parallel have the _____ slope and _____ intercepts.

2. If two lines are perpendicular, the slope of one is the _____ _____ of the other.

Follow the directions.

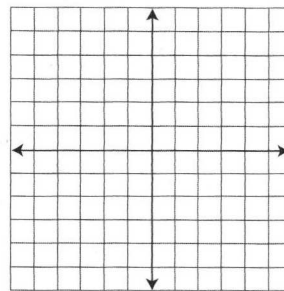3. Find the slope and intercept of the line that is parallel to Y = 3X + 2 while passing through the point (0, 0).

4. Describe the new line in slope/intercept form.

5. Graph both lines.

6. Find the slope and intercept of the line that is parallel to Y = 2X −1 while passing through the point (3, 1).
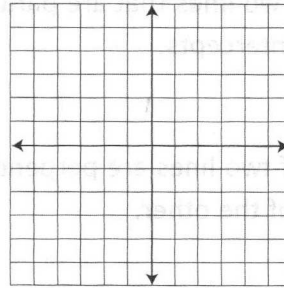

7. Describe the new line in slope/intercept form.
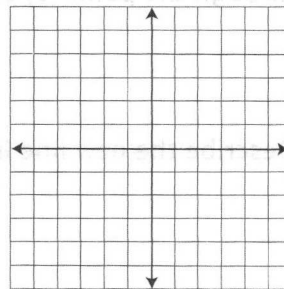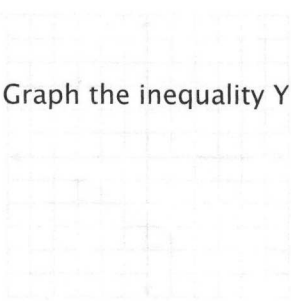
8. Graph both lines.

9. Find the slope and intercept of the line that is perpendicular to $Y = -X + 4$ while passing through the point $(-1, 5)$.
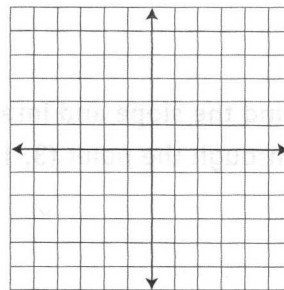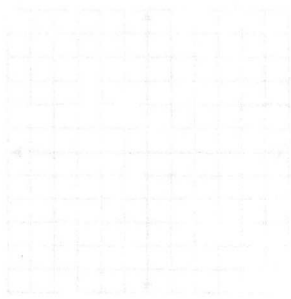
10. Describe the new line in slope/intercept form.

11. Graph both lines.

12. Graph the inequality $Y \leq X + 3$.

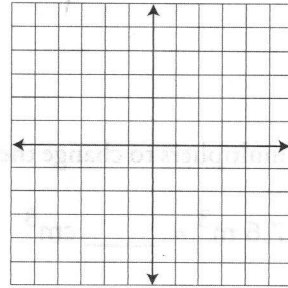13. Graph the inequality $-Y > 2X + 1$.

Follow the directions.

1. Find the slope and intercept of the line that is parallel to to 2Y = X while passing through the point (-2, -3).

2. Write the slope/intercept formula of the new line.

3. Write the equation of the new line in standard form.

4. Graph the new line.

For #5–8: Graph $-Y \geq 2X$.

5. Graph $-Y = 2X$.

6. Plot two points, one on each side of the line.

7. Put the points in the equation, and test whether they are true or not.

8. Shade in the graph, and make the line solid or dotted.
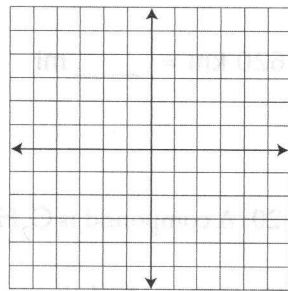
Given the two points $(-1, -3)$ and $(4, 4)$:

9. Find the slope and the intercept.

10. Write the slope/intercept formula.

11. Write the standard equation of the line.

12. Graph the line.
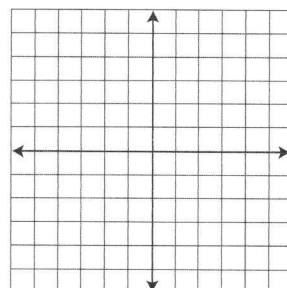
13-15. The prodigal son was 60 miles from home when he left the pig slop. He started walking toward home at 4 mph. His father saw him coming and ran to meet him at 8 mph. If the son walked 12 hours before they met, how long did the father run?

Use unit multipliers to change the units.

16. $7.6 \text{ m}^3 =$ _____ cm^3

Use unit multipliers to convert from metric to imperial measure.

17. $620 \text{ km} =$ _____ mi

For #18–20: A compound is C_2H_5Cl.

18.   What percent of the compound is carbon?

19.   What percent of the compound is hydrogen?

20.   What percent of the compound is chlorine?