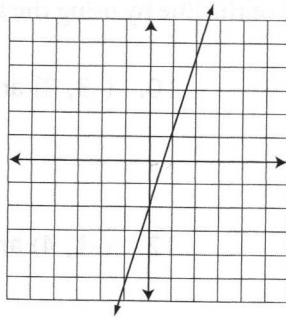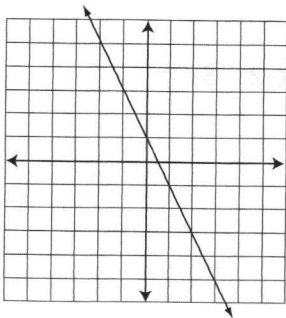Follow the directions.

1. Estimate the slope.

2. Estimate the intercept.

3. Estimate the slope.

4. Estimate the intercept.

5. Write 3X + 2Y = 9 in the slope-intercept form.

6. Write Y = 5X + 1 in the standard form of the equation of a line.

7. Write 2X + 1/2Y = 3 in the slope-intercept form.

8. Write Y = X + 8 in the standard form of the equation of a line.

Given the following points, find the slope of the line by using the formula.
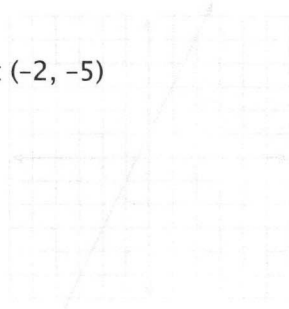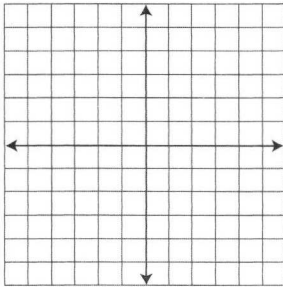
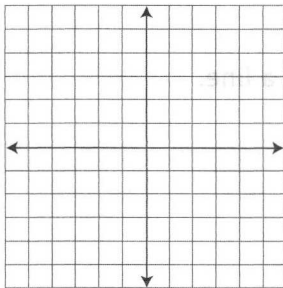9. (2, 1) and (–3, –4)

10. (–3, 2) and (5, 1)

11. (1, –6) and (5, 2)

12. (–1, 4) and (1, –2)

Given the following information, find the slope if necessary, find the intercept, write both forms of the equation, and graph the line.
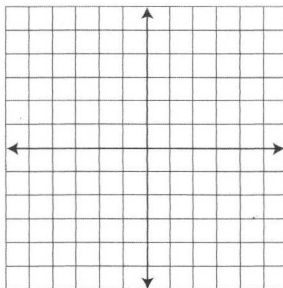
13. slope of 2 through the point (–2, –5)

14. two points: (–2, 2) and (3, –4)

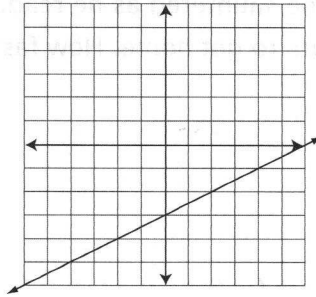15. slope of –1 through the point (5, 5)

Follow the directions.

1. Estimate the slope m.

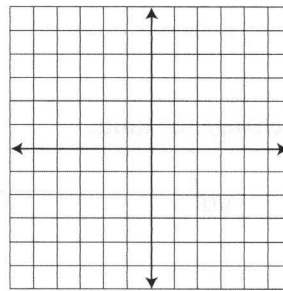2. Estimate the intercept b.

Given the slope 5/2 through the point $(-2,-1)$:

3. Find the intercept.

4. Write the slope/intercept formula.
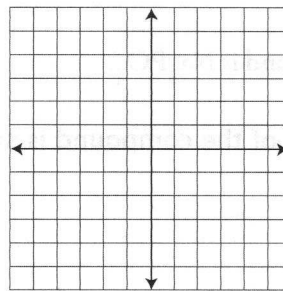
5. Write the standard equation of a line.

6. Graph the line.

Given the two points $(-1, -3)$ and $(1, 5)$:

7. Find the slope and intercept.

8. Write the slope/intercept formula.

9. Write the standard equation of a line.

10. Graph the line.

11-13. Romeo raced to the palace post office to get Juliet's letter. He made it in 30 minutes. On the way home he sauntered as he read. He ran 6 mph faster than he walked. It took him two hours to get home. How fast did he run and walk? How far is it to the palace post office?

14-15. Marge walked dejectedly to the mailbox at the end of the long driveway at 225 feet per minute. She ran back four times as fast as she walked. Her time walking was 3.6 minutes more than her time running. How far is it to the mailbox, and how long did it take her to run back?

Use unit multipliers to change the units.

16. $400 \text{ ft}^2 =$ _____ yd^2

Use unit multipliers to convert from imperial to metric or metric to imperial measure.

17. $.75 \text{ kg} =$ _____ lb

For #18–20: A compound is Na_3PO_4.

18. What percent of the compound is sodium?

19. What percent of the compound is phosphorus?

20. What percent of the compound is oxygen?