1. Point-slope form is useful when the slope and the *y*-intercept are known. If you are given two points, calculate the slope and use one of the points and the slope-intercept form of the equation to solve for the *y*-intercept. If you are given the slope and a point that is not the *y*-intercept, use the point-slope form. Standard form can be used to write the equations of vertical and horizontal lines. To find the *x*- or *y*-intercept of a line, use standard form. The slopes of lines determine whether the lines are parallel or perpendicular.
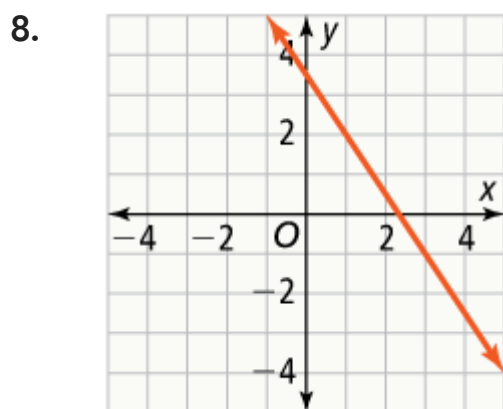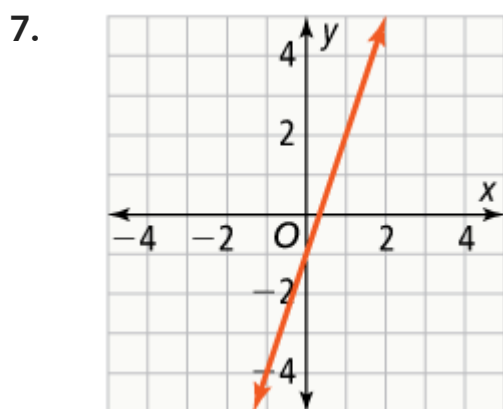
2. reciprocals

3. standard form

4. parallel

5. slope-intercept form

6. point-slope form

7.

8.

9. $y = 3x - 6$

10. $y = -\frac{5}{3}x + 6\frac{1}{3}$

11. $y = -50x + 900$

12. $y + 2 = 0.5(x - 4)$

13. $y - 5 = -3(x + 2)$

14. $y - 1 = \frac{3}{8}(x - 3)$

15. $y - 4 = -0.5(x - 1.5)$

16. $y - 123.75 = -8.25(x - 5)$; $15

17. $3x + 5y = 15$

18. $4x - y = 5$

19. $5x + y = 23$

20. *x*-intercept: 6; *y*-intercept: −10

21. *x*-intercept: 24; *y*-intercept: 8

22. $1.25x + 1.50y = 25$

23. $-\frac{1}{3}$

24. $y = -3x + 7$

25. $y = \frac{1}{2}x + \frac{1}{2}$

26. $y - 7 = -4(x - 1)$

27. $y - 6 = -2(x + 2)$

28. neither

29. parallel