37. $x \geq 64$

38. $x \leq 129$

39. $x > 27$

40. $0 \leq x < \frac{64}{49}$

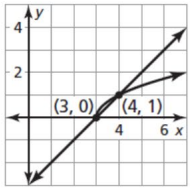
41. $0 \leq x \leq \frac{25}{4}$

42. $x \geq 20$

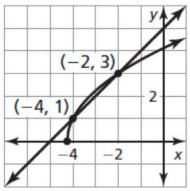
43. $x > -220$

44. $x \geq 0$

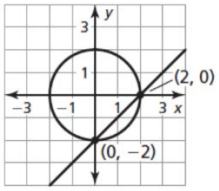
47. (3, 0) and (4, 1);



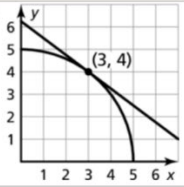
48. (−4, 1) and (−2, 3);



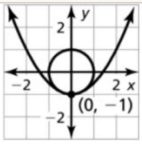
49. (0, −2) and (2, 0);



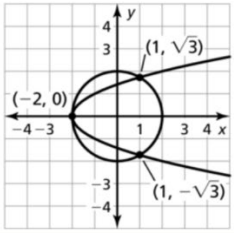
50. (3, 4);



51. (0, −1);



52. $(-2, 0)$, $(1, \sqrt{3})$, and $(1, -\sqrt{3})$;



53. **a.** The greatest stopping distance is 450 feet on ice. On wet asphalt and snow, the stopping distance is 225 feet. The least stopping distance is 90 feet on dry asphalt.

b. about 272.2 ft; When $s = 35$ and $f = 0.15$, $d \approx 272.2$.