

1. Center $(0, -5)$ radius $2\sqrt{2}$

2. $(x-5)^2 + (y-10)^2 = 5$

3. x axis only

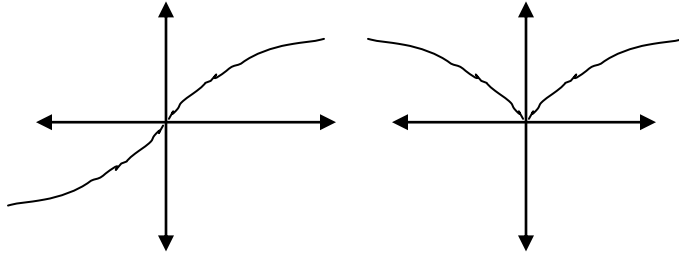
4. a. $\left(\frac{13}{2}, 0\right)$ b. $\left(0, -\frac{13}{5}\right)$ c. $m = \frac{2}{5}$ d. $y = -\frac{5}{2}x + \frac{1}{2}$

5. a. $y = -\frac{6}{5}x + \frac{28}{5}$ a. $x = 3$ b. $y = -2$

6.

a. if $f(-x) = -f(x)$

b. if $f(-x) = f(x)$



7. a, b, e, f

8. a. Domain: $[-4, 3) \cup (3, \infty)$ b. \mathbb{R} c. \mathbb{R}

9. a. 1 b. 10 c. 1

10. Domain: $[5, \infty)$ Range: $(-\infty, 1]$ $f(x) = -\sqrt{x+5} - 1$

11. a. $g(f(x)) = 6x^2 - 3x + 8$ b. $\frac{f(x+h) - f(x)}{h} = 4x + 2h - 1$ c. $\frac{1}{5}$ d. -4

e. $6x^3 + 7x^2 - 2x + 5$

12. False, function is even.

13. a. $f^{-1}(x) = x^3 - 7$ b. $f^{-1}(x) = \frac{6x-3}{2+2x}$

14. couldn't get picture exact:

