

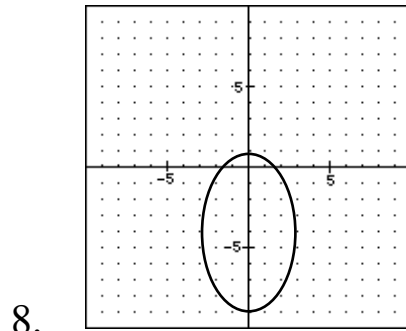
## Problem Set 76 — Even Answers

2. 104 g, 46.154%

4. 97.7%

6a. 24

b. 12



$$Y_1 = -4 + \sqrt{25 - \frac{25}{9}x^2}$$

$$Y_2 = -4 - \sqrt{25 - \frac{25}{9}x^2}$$

10.  $\frac{(x+3)^2}{9} + \frac{(y-2)^2}{25} = 1$

12a. between 0 and 1: 0.212

b. between 1 and 2: 1.750

c. between 3 and 4: 3.105

14.  $d = 41$ : yes, two times

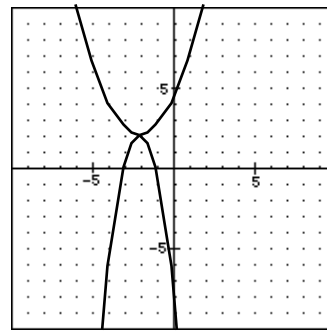
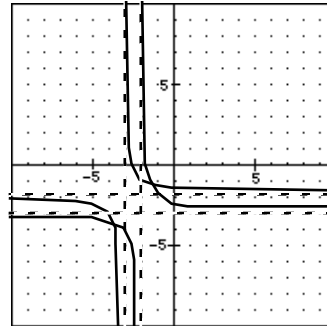
16.  $\frac{2x-2}{x-5}$

18. (9, 6)

20.  $x = \frac{1}{8} \pm \frac{\sqrt{15}}{8}i$

22.  $2 - i$

24.  $f^{-1}(x) = \frac{1}{x+2} - 3$



26.

28.  $x - 2$

30.  $V = \left(\frac{10}{3} + \frac{25}{24}\pi\right)\text{in}^3$   
 $\approx 6.606 \text{ in}^3$