

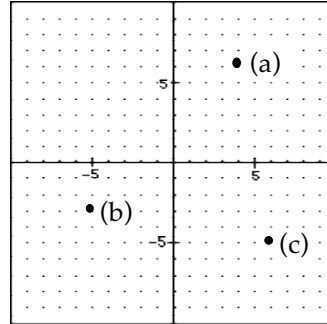
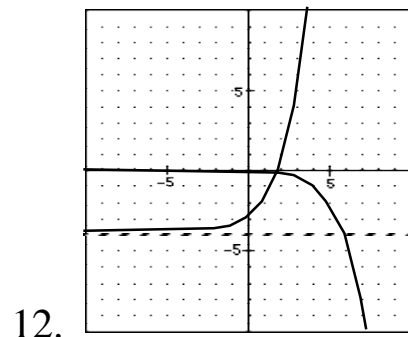
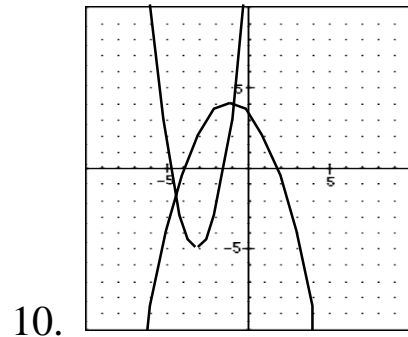
Problem Set 62 — Even Answers

2. 40 miles

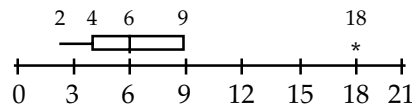
4. 396

6. $\frac{60(3600)}{5280}$ mph ≈ 40.909 mph

8. The graph of the first equation is a parabola whose vertex is the point $(4, 5)$ and opens up, while the graph of the second equation is a parabola whose vertex is the point $(-4, 5)$ and opens down.



14.



16.

$$r = 16, \quad \bar{x} = 7.5, \quad \text{med} = 6$$

$$\text{mode} = \emptyset, \quad Q_1 = 4, \quad Q_3 = 9$$

$$\text{IQR} = 5, \quad \sigma \approx 5.188$$

18. $3 + 4i$

20. $x^{c+p+1}y^{\frac{2b}{3}}$

22a. $\frac{1}{4}$ b. 8

24. $x - 2x^{\frac{1}{2}}y^{\frac{1}{4}} + y^{\frac{1}{2}}$

26. $x = \frac{1}{5} \pm \frac{\sqrt{21}}{5} \approx -0.717, 1.117$

28. $C = 30$

$$M = \frac{10}{\tan 30^\circ} \approx 17.321$$

30. $3 + 8x^{-2}y^{-6}z^{-4}$