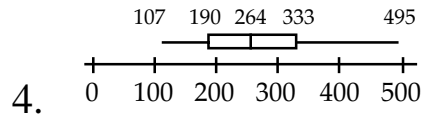


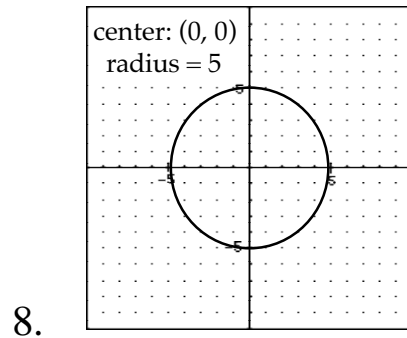
## Problem Set 57 — Even Answers

2.  $P(B \cap G) = \frac{1}{6}$



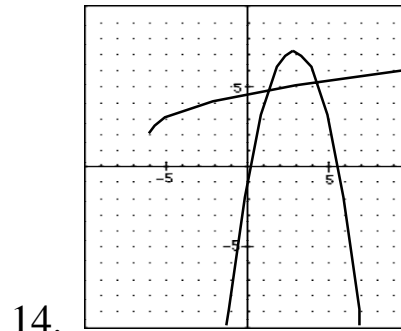
range = 388,    median = 264  
 $Q_1 = 190,$      $Q_3 = 333$   
 IQR = 143,     $\sigma \approx 102.613$

6.  $y = -\frac{5}{7}x + \frac{53}{7}$



10.  $Y_1 = \sqrt{56 - x^2}, Y_2 = -Y_1$   
 This conic is an origin centered circle with a radius of  $\sqrt{56} \approx 7.483$ .

12a.  $h(k(x)) = x$   
 b.  $(k \circ h)(x) = x$   
 c.  $\{x \in \mathfrak{R} \mid x \neq -2\}$   
 d.  $k(h(3)) = 3$



16a.  $x^{\frac{5}{14}}$                       b.  $3^{\frac{5}{14}}$

18.  $\frac{-10 + 4\sqrt{2}}{17}$

20.  $\frac{5\sqrt{6} + 117\sqrt{15}}{15}$

22.  $x = \frac{2}{3}$

24.  $x = -3, 7$

26.  $x = 1 \pm \sqrt{2}$   
 $\approx -0.414, 2.414$

28.  $1 \times 10^{24}$

30.  $x = \sqrt{34} \approx 5.831$   
 $y = \frac{20}{3}$   
 $z = \frac{4\sqrt{34}}{3} \approx 7.775$