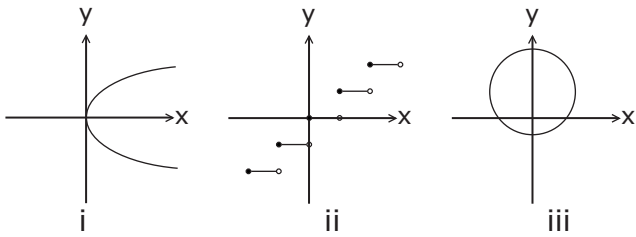


36.) Which of the following represent(s) functions of  $x$  ?



- a) i only                      d) i and iii  
 b) ii only                      e) i, ii, and iii  
 c) iii only

37.) An equation of the circle with center  $(-2, k)$  and radius 5 is

- a)  $\frac{x^2}{4} + \frac{y^2}{k^2} = 25$   
 b)  $(x - 2)^2 + (y + k)^2 = 5$   
 c)  $(x - 2)^2 + (y + k)^2 = 25$   
 d)  $(x + 2)^2 + (y - k)^2 = 5$   
 e)  $(x + 2)^2 + (y - k)^2 = 25$

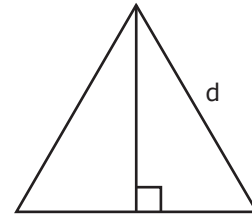
38.) The solution set of  $x^6 - 7x^3 + 12 = 0$  includes

- a) 1                              d)  $\sqrt[3]{4}$   
 b)  $\sqrt[3]{12}$                       e)  $\sqrt[3]{6}$   
 c)  $\sqrt[6]{12}$

39.) When you solve the equation  $x^3 - 3x^2 + 2x = 0$ , how many roots are greater than  $\frac{1}{2}$  ?

- a) no root                      d) three roots  
 b) one root                      e) all roots  
 c) two roots

40.) The area of an equilateral triangle with sides of length  $d$  is



- a)  $\frac{d^2}{2}$                       d)  $\frac{\sqrt{3}d^2}{4}$   
 b)  $\frac{d^2}{4}$                       e)  $\frac{\sqrt{2}d^2}{4}$   
 c)  $\frac{\sqrt{3}d^2}{8}$

41.) An equation for the circle of radius 1 with center at  $(0, 1)$  is

- a)  $x^2 + y^2 - 2y = 0$   
 b)  $x^2 + y^2 + 2y = 0$   
 c)  $x^2 + y^2 - 2y = 2$   
 d)  $x^2 + y^2 + 2y = 2$   
 e)  $x^2 + y^2 = 0$