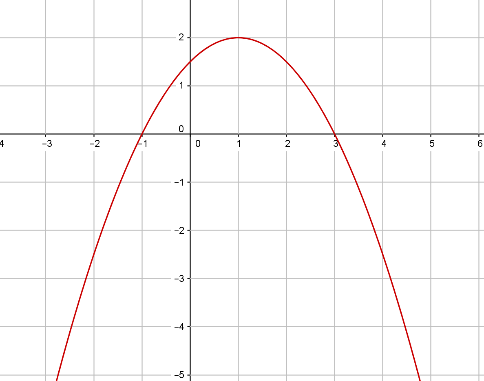
1. **Find the vertex of this parabola: y= 15 (x-3)²+6.**

**a.** (-3,-6)   
**b.** (-3, 6)   
**c.**  (3, 6)   
**d.** (3,-6)

1. **Write the equation of the parabola having the vertex (1.5,2.5) and the point A(3,9)**

**a.** y= 3(x-1.5)²+2.5  
**b.** y= 3(x+1.5)²+2.5  
**c.** y=3(x-1.5)²-2.5  
**d.** y= 1.5(x-2.5)²-3

**3. What is the equation of the parabola below?**

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**a.** y = 2(x-1)²+2  
**b.** y = -2(x-1)²-2  
**c.**  y = 0.5(x+1)²+2  
**d.** y= -0.5 x²+x+1.5

4. **Choose that best describes the transformation of y = x² to y= 7(x-4)²+10**  
  
 a. Translate 10 units right, vertical stretch by factor of 7, translate 4 units up.  
 b. Translate 4 units right, vertical stretch by factor of 7, translate 10 units up.  
 c. Translate 7 units right, vertical stretch by factor of 10, translate 4 units up.  
 d. Translate 4 units right, vertical stretch by factor of 10, translate 10 units up.

5. **What is the vertex form of this standard equation: y= -8x²+16x+12**

a. y= -8(x+(-1))²+20

b. y= -8(x+(-1))²-20

c. y= 8(x-(-1))²+20

d. y= -16(x+(-1))²-20

**Answers:**

1. **c**
2. **a**
3. **d**
4. **b**
5. **a**