Answer on Question #56447 – Math – Algebra

1. Which of the following are quadratic functions? There can be multiple right answers. Check all that apply.

Y= 5x - 3x^2

Y= x - x^3

Y= 2x^2 -3x + 7

Y= 3x -4

Answer: Y= 5x - 3x^2 and Y=2x^2 -3x + 7 are quadratic functions, because they have a standard form: y = ax^2 + bx + c

2. Which of the following Quadratic functions has a graph that opens downward? There can be multiple right answers. Check all that apply.

Y= 3x^ - x - 1

Y= - (2x^2 - 1)

Y= 5/2 x - 3x^2

Y = 3/2 x^2 -3x +15

Answer: Y= - (2x^2 - 1) and Y= 5/2 x - 3x^2, because the coefficient beside x^2 is negative: -2x^2; -3x^2.

3. In which form is the following function written?

Y= -2(x - 3)(x+5)

Answer: intercept form, $Y = a(x - p)(x - q)$.

4. In which form is the following function written?

Y-3 = 1/2 (x - 1)^2

Answer: vertex form, $Y - k = a(x - h)^2$.