

Quiz template, types of Questions

- 1) Find vertex of quadratic (1)
- 2) Graph parabola, label vertex, y-intercepts, and x-intercepts (if they exist.) (2)
- 3) Find Function Given vertex and point, write in General form $f(x) = ax^2 + bx + c$. (1) *Similar to Q.11 on H.W.*
- 4) Find x-intercepts/zeros/Roots. All mean the same thing. (1)
- 5) Write in Standard form/vertex form. (1)

total of 6-8 questions

ex. of 5.

write in standard form.

$$f(x) = 6x^2 + 12x - 7$$

$$a = 6$$

$$b = 12$$

$$c = -7$$

Vertex $(-1, -13)$

$$f(x) = \frac{6}{a} (x+1)^2 - 13$$

opp. k
h.

Vertex k

$$\left(-\frac{b}{2a}, f\left(-\frac{b}{2a}\right) \right)$$

h \rightarrow plug in x to find y

Step 1

Find vertex h

$$-\frac{12}{2(6)} = -\frac{12}{12} = -1$$

$$\begin{aligned} f(-1) &= 6(-1)^2 + 12(-1) - 7 \\ &= 6 - 12 - 7 \\ &= -13 \\ & \quad k \end{aligned}$$