Algebra 1 Practice Test Name V1 KEY 2023 2020

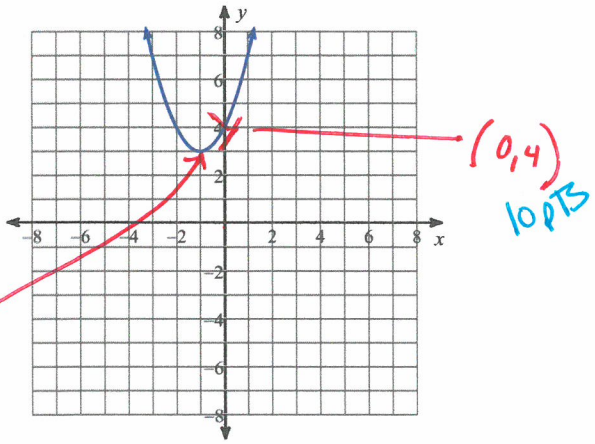
10.1 to 10.3 ~~Quiz (combined with FUNC.e)~~ Date_____ Period____

FUNC.e.1 (20 pts)
For each quadratic function - Clearly label features in the white space outside of the graph.

(a) Use an arrow to mark the vertex with a "V" and give its ordered pair; and

(b) Use an arrow to mark the y-intercept with a "Y" and give its ordered pair.

1)



(0,4) 10 PTS

V(-1,3) 10 PTS

FUNC.e.2 (30 pts)
For each quadratic function, clearly answer the following questions:

(a) Identify the coefficients of the quadratic function. Label "A, B, C"

(b) Determine the direction of the parabola and explain. Label "SHAPE:"

(c) Identify the ordered pair for the y-intercept and explain. Label "Y-INT:"

2) $f(x) = -x^2 + 10$ a=-1, b=0, c=10

Opens DOWN b/c A=-1

Y-int (0,10) b/c C=10

10 PTS EACH

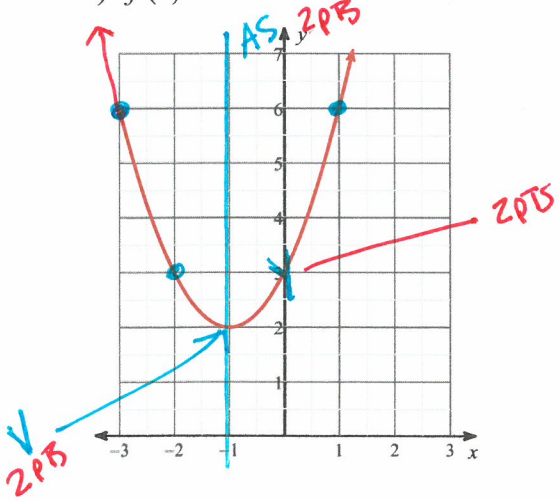
(11)

FUNC.e.3 (16 pts/4pts each part)

5) Graph the quadratic function in standard form and identify the y-intercept, axis of symmetry, and vertex.

(a) Clearly graph at least 5 points and provide the supporting table of values in the space provided below.
Mark the vertex on the table.
(b) Give the ordered pair for the y-intercept:
(0,3) 2pts
Mark it on the graph with a "Y".
(c) Calculate the axis of symmetry below.
What is the appropriate equation for A.S.:
x = -1 2pts
Mark it "AS" on the graph.
(d) Give the ordered pair for the vertex
(-1, 2) 2pts
Mark it "V" on the graph.

3) $f(x) = x^2 + 2x + 3$



A = 1 B = 2 C = 3

4pts

V

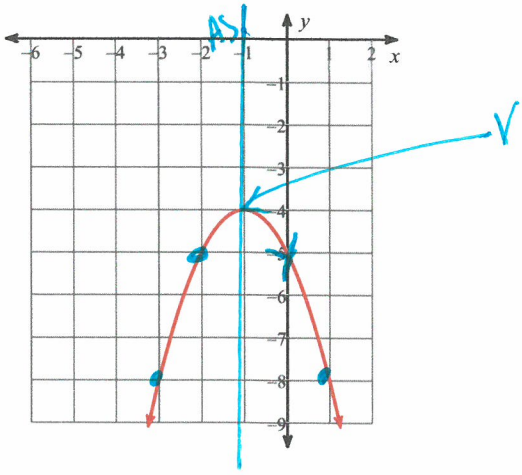
X	-3	-2	-1	0	1
Y	6	4	2	4	6

FUNC.e.3 (16 pts/4pts each part)

5) Graph the quadratic function in standard form and identify the y-intercept, axis of symmetry, and vertex.

(a) Clearly graph at least 5 points and provide the supporting table of values in the space provided below.
Mark the vertex on the table.
(b) Give the ordered pair for the y-intercept:
(0, -5)
Mark it on the graph with a "Y".
(c) Calculate the axis of symmetry below.
What is the appropriate equation for A.S.:
x = -1
Mark it "AS" on the graph.
(d) Give the ordered pair for the vertex
(-1, -4)
Mark it "V" on the graph.

4) $f(x) = -x^2 - 2x - 5$



A = -1 B = -2 C = -5

V

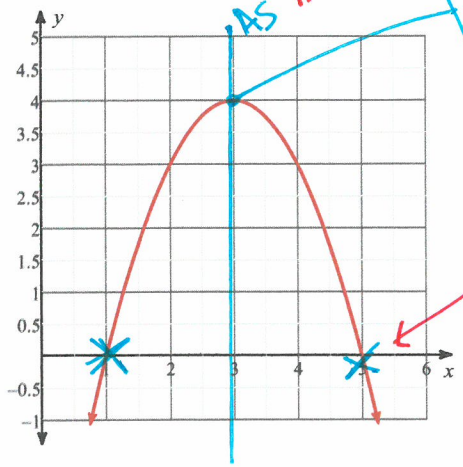
X	-3	-2	-1	0	1
Y	-8	-5	-4	-5	-8

V1

FUNC.e.4 (9 points each) **Solve the quadratic function by graphing.**

(a) Clearly graph at least 5 points and provide the supporting table of values in the space provided below. Mark the vertex on the table; (b) If possible, mark intercepts on graph with "x" an "y". (c) Mark the "AS" on the graph. (d) Circle the solutions are label x=____.

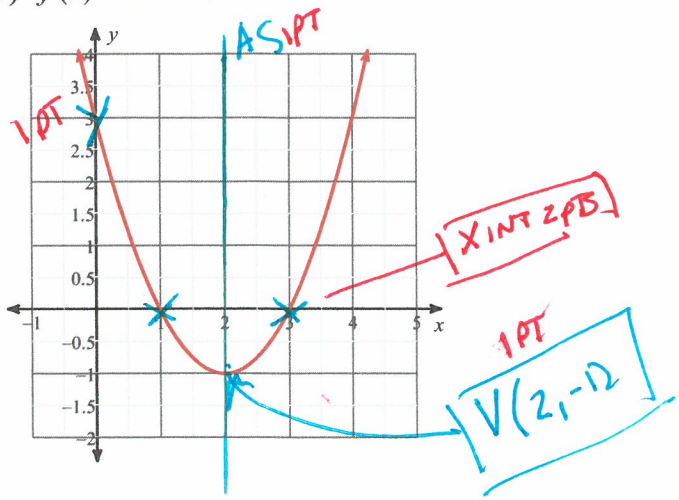
5) $f(x) = -x^2 + 6x - 5$



X = 1, 5 4PT

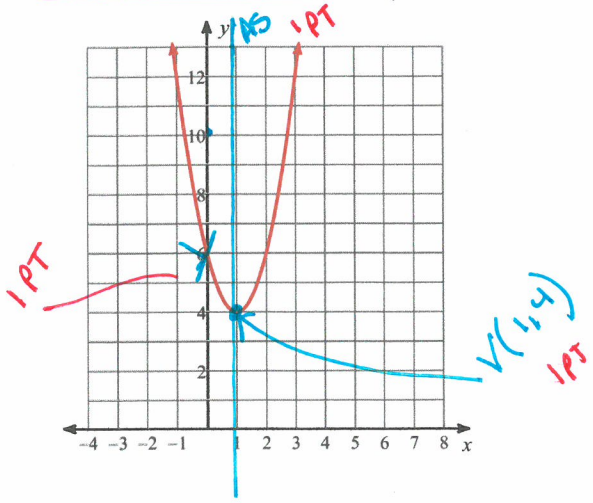
Table 1PT

6) $f(x) = x^2 - 4x + 3$



X = 1, 3 4PTS

7) $f(x) = 2x^2 - 4x + 6$ (BONUS +6)



X = NO SOLUTION 3PTS