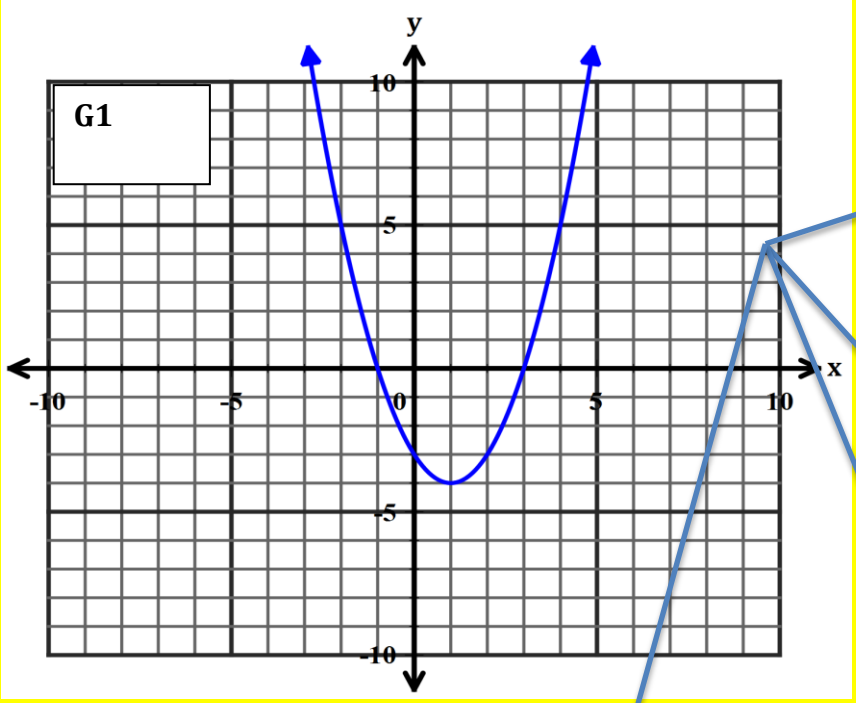


S2

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

V1

$f(x) = (x - 1)^2 - 4$

I 5

$f(x) = (x - 3)(x + 1)$

D6

x-intercepts: (3, 0) (–1, 0)
y-intercept: (0, –3)

vertex: (1, –4)

Quadruple Quadratics Matching

Match each graph to its standard form, vertex form, intercept form, and x- and y-intercepts.

Match a Quadratic Graph to its Standard, Vertex, and Intercept Form

Name Key Period Date

Name

1. Match each graph with its corresponding description and function in Standard Form, Vertex Form, and Intercept Form.

Graph	Standard Form	Vertex Form	Intercept Form	Description
G1	2	1	5	6
G2	5	9	2	3
G3	3	6	9	8
G4	7	5	4	4
G5	1	3	8	9
G6	6	4	7	1
G7	8	2	6	2
G8	4	7	1	5
G9	9	8	3	7

2.

a. Name 1 key feature that helped you match a *graph* with *Standard Form*.

"c" is y-intercept

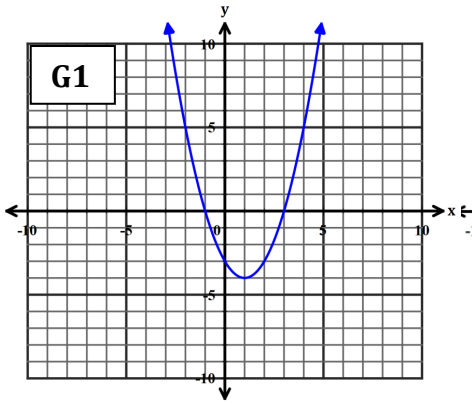
b. Name 1 key feature that helped you match a *graph* with a *Vertex Form*.

Vertex (change sign in parentheses)

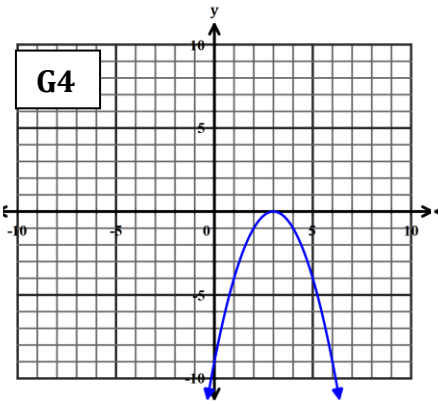
c. Name another key feature that helped you match *Standard Form* with a *description*.

"a" is positive (up) or negative (down)

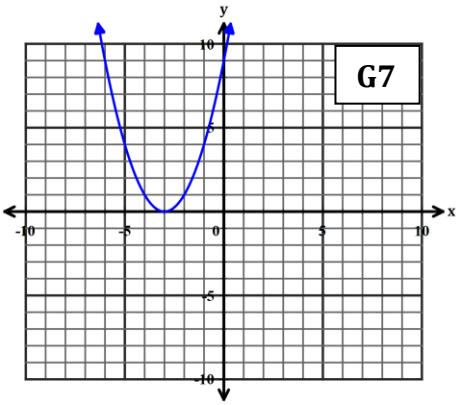
G1



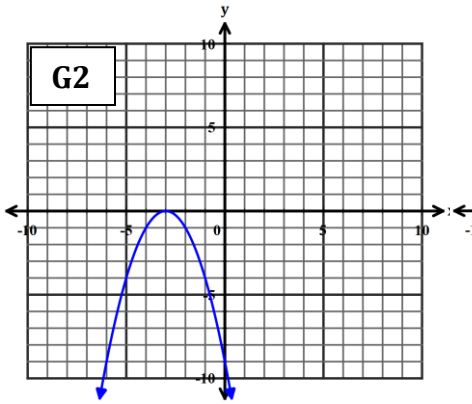
G4



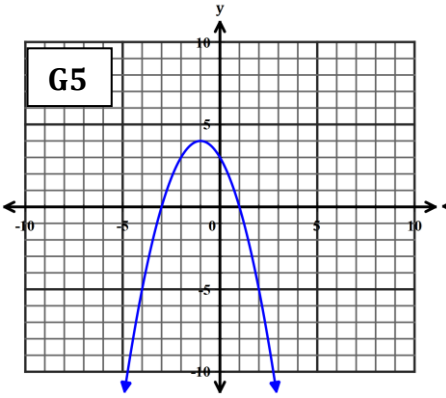
G7



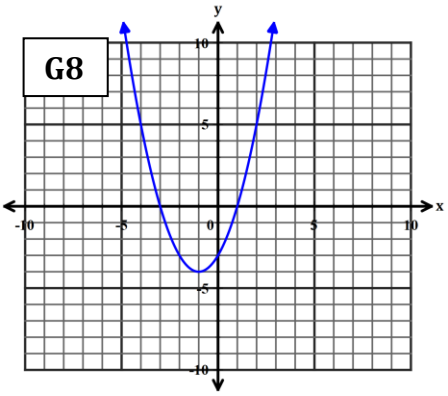
G2



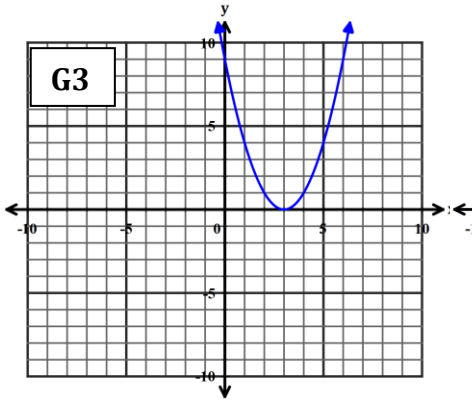
G5



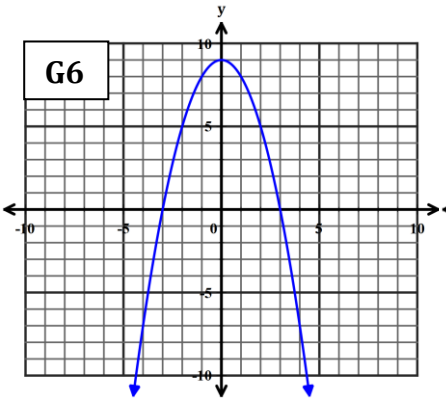
G8



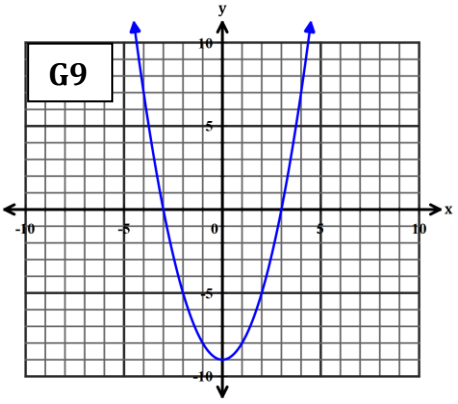
G3



G6



G9



S1

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

S4

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

S7

$f(x) = -x^2 + 6x - 9$

S2

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

S5

$f(x) = -x^2 - 6x - 9$

S8

$f(x) = x^2 + 6x + 9$

S3

$f(x) = x^2 - 6x + 9$

S6

$f(x) = -x^2 + 9$

S9

$f(x) = x^2 - 9$

V1

$f(x) = (x - 1)^2 - 4$

V4

$f(x) = -x^2 + 9$

V7

$f(x) = (x + 1)^2 - 4$

V2

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

V5

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

V8

$f(x) = x^2 - 9$

V3

$f(x) = -(x + 1)^2 + 4$

V6

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

V9

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

I1

$f(x) = (x + 3)(x - 1)$

I 2

$f(x) = -(x + 3)(x + 3)$

I 3

$f(x) = (x - 3)(x + 3)$

I 4

$f(x) = -(x - 3)(x - 3)$

I 5

$f(x) = (x - 3)(x + 1)$

I 6

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

I 7

$f(x) = -(x - 3)(x + 3)$

I 8

$f(x) = -(x + 3)(x - 1)$

I 9

$f(x) = (x - 3)(x - 3)$

D1

x-intercepts: (–3, 0) (3, 0)
y-intercept: (0, 9)

vertex: (0, 9)

D2

x-intercept: (–3, 0)
y-intercept: (0, 9)

vertex: (–3, 0)

D3

x-intercept: (–3, 0)
y-intercept: (0, –9)

vertex: (–3, 0)

D4

x-intercept: (3, 0)
y-intercept: (0, –9)

vertex: (3, 0)

D5

x-intercepts: (–3, 0) (1, 0)
y-intercept: (0, –3)

vertex: (–1, –4)

D6

x-intercepts: (3, 0) (–1, 0)
y-intercept: (0, –3)

vertex: (1, –4)

D7

x-intercepts: (–3, 0) (3, 0)
y-intercept: (0, –9)

vertex: (0, –9)

D8

x-intercept: (3, 0)
y-intercept: (0, 9)

vertex: (3, 0)

D9

x-intercepts: (–3, 0) (1, 0)
y-intercept: (0, 3)

vertex: (–1, 4)