

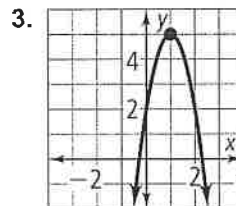
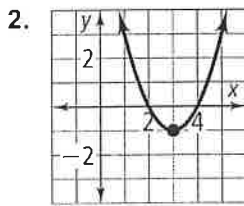
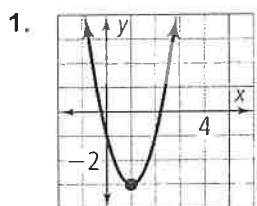
9-1

Practice

Form G

Quadratic Graphs and Their Properties

Identify the vertex of each graph. Tell whether it is a minimum or a maximum.



Graph each function.

4. $f(x) = 3x^2$

5. $f(x) = -2.5x^2$

6. $f(x) = -\frac{1}{5}x^2$

- SKIP -

Order each group of quadratic functions from widest to narrowest graph.

7. $y = -3x^2, y = -5x^2, y = -1x^2$

8. $y = 4x^2, y = -2x^2, y = -6x^2$

9. $y = x^2, y = \frac{1}{3}x^2, y = 2x^2$

10. $y = \frac{1}{6}x^2, y = \frac{1}{4}x^2, y = \frac{1}{2}x^2$

Graph each function.

11. $f(x) = x^2 + 1$

12. $f(x) = x^2 - 2$

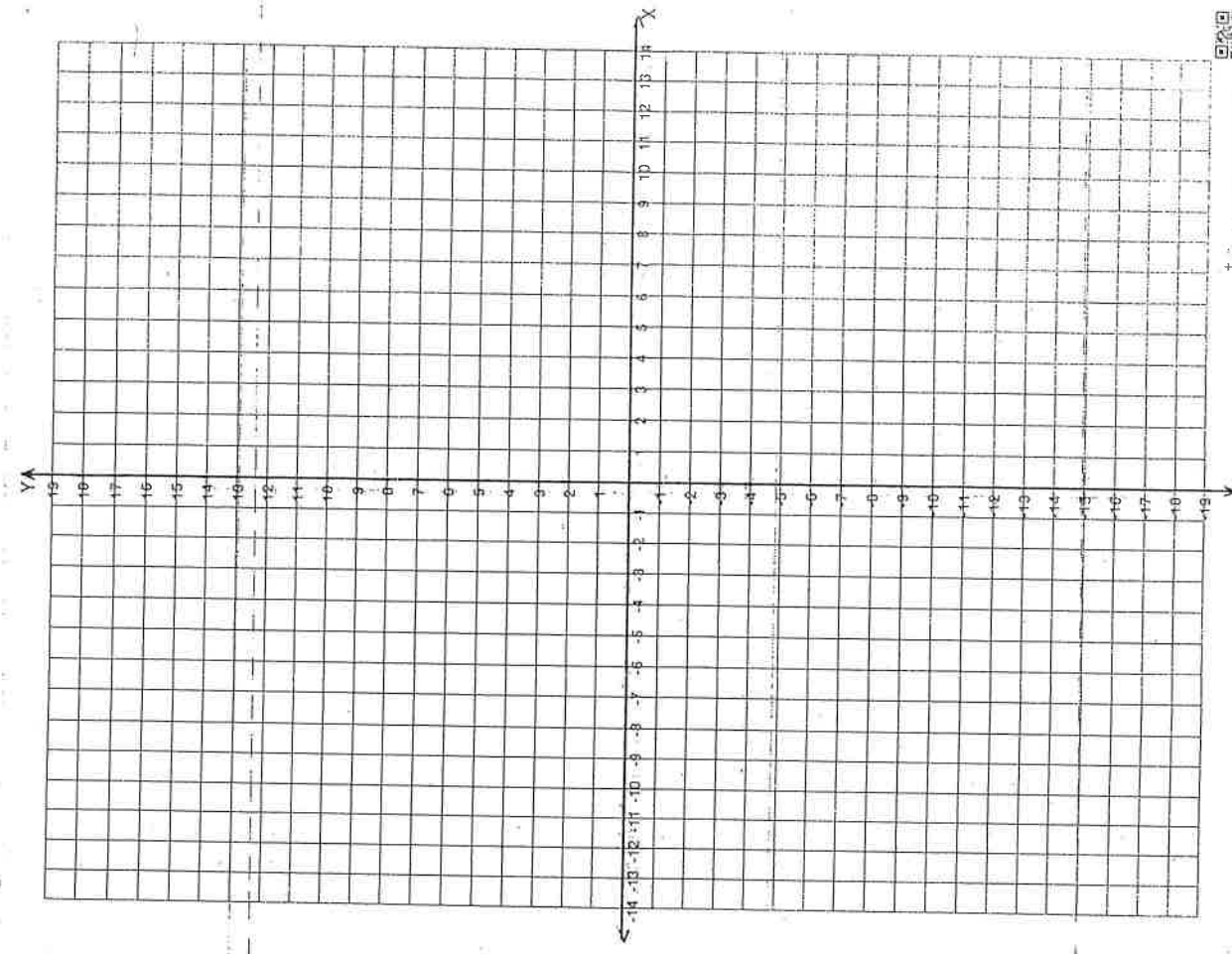
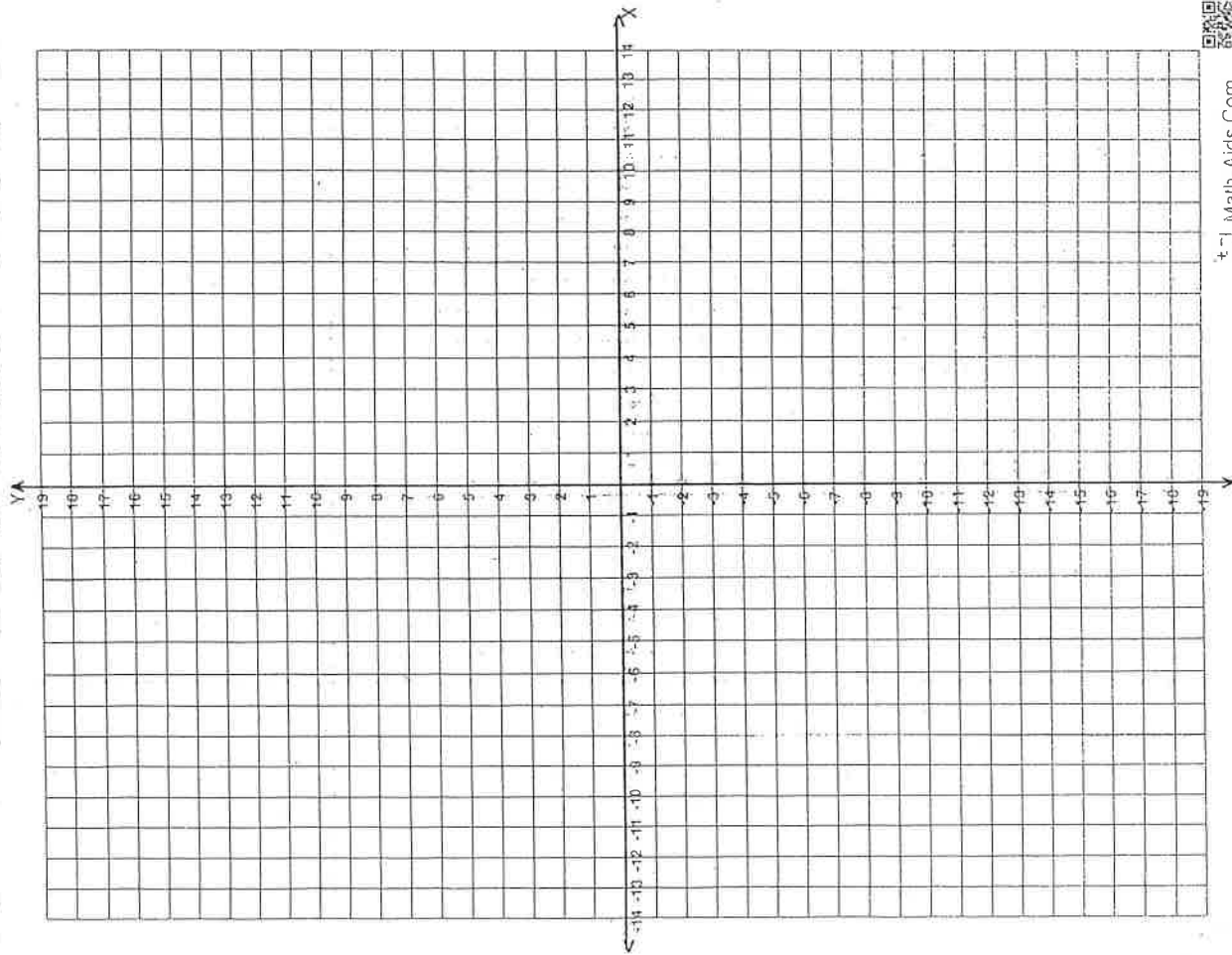
13. $f(x) = 2x^2 + 1$

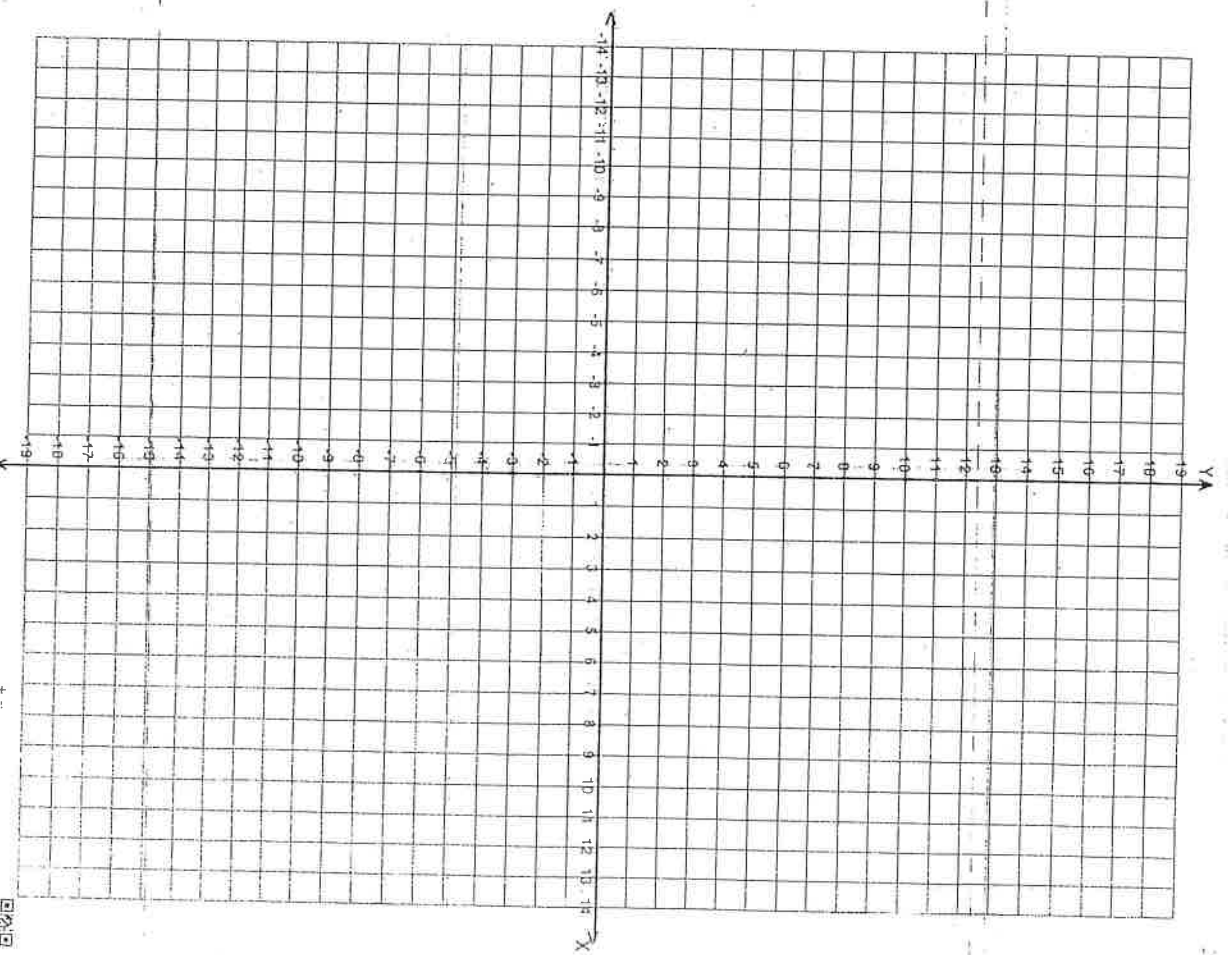
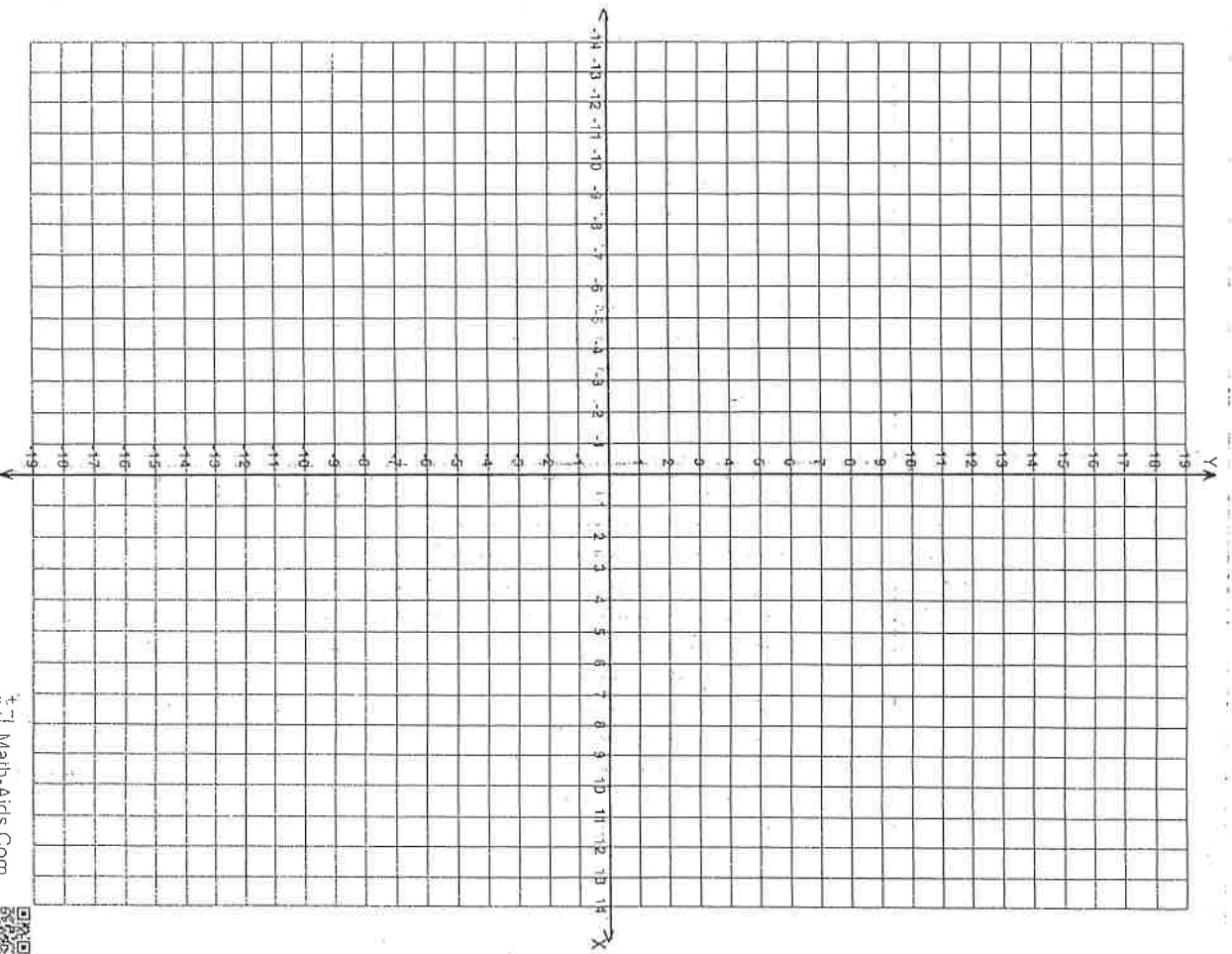
14. $f(x) = -\frac{1}{2}x^2 + 5$

15. $f(x) = -3x^2 - 4$

16. $f(x) = 5x^2 - 10$

- SKIP -





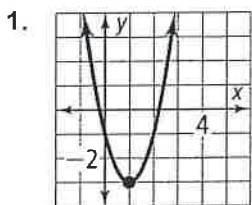
9-1

Practice

Form G

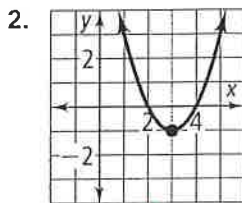
Quadratic Graphs and Their Properties

Identify the vertex of each graph. Tell whether it is a minimum or a maximum.

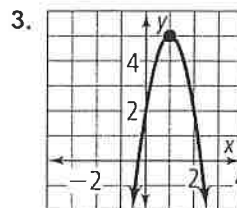


$(1, -3)$ min.

Graph each function.



$(3, -1)$ min.



$(1, 5)$ max.

4. $f(x) = 3x^2$

x	f(x)
1	3
0	0
-1	3

5. $f(x) = -2.5x^2$

- SKIP -

6. $f(x) = -\frac{1}{5}x^2$

x	f(x)
5	-5
0	0
-5	-5

Order each group of quadratic functions from widest to narrowest graph.

7. $y = -3x^2, y = -5x^2, y = -1x^2$

$y = -x^2, y = -3x^2, y = -5x^2$

8. $y = 4x^2, y = -2x^2, y = -6x^2$

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$y = \frac{1}{6}x^2, y = \frac{1}{4}x^2, y = \frac{1}{2}x^2$

Graph each function.

11. $f(x) = x^2 + 1$

x	f(x)
-1	2
0	1
1	2

12. $f(x) = x^2 - 2$

x	f(x)
-1	-1
0	-2
1	-1

13. $f(x) = 2x^2 + 1$

x	f(x)
-1	3
0	1
1	3

14. $f(x) = -\frac{1}{2}x^2 + 5$

x	f(x)
-2	3
0	5
2	3

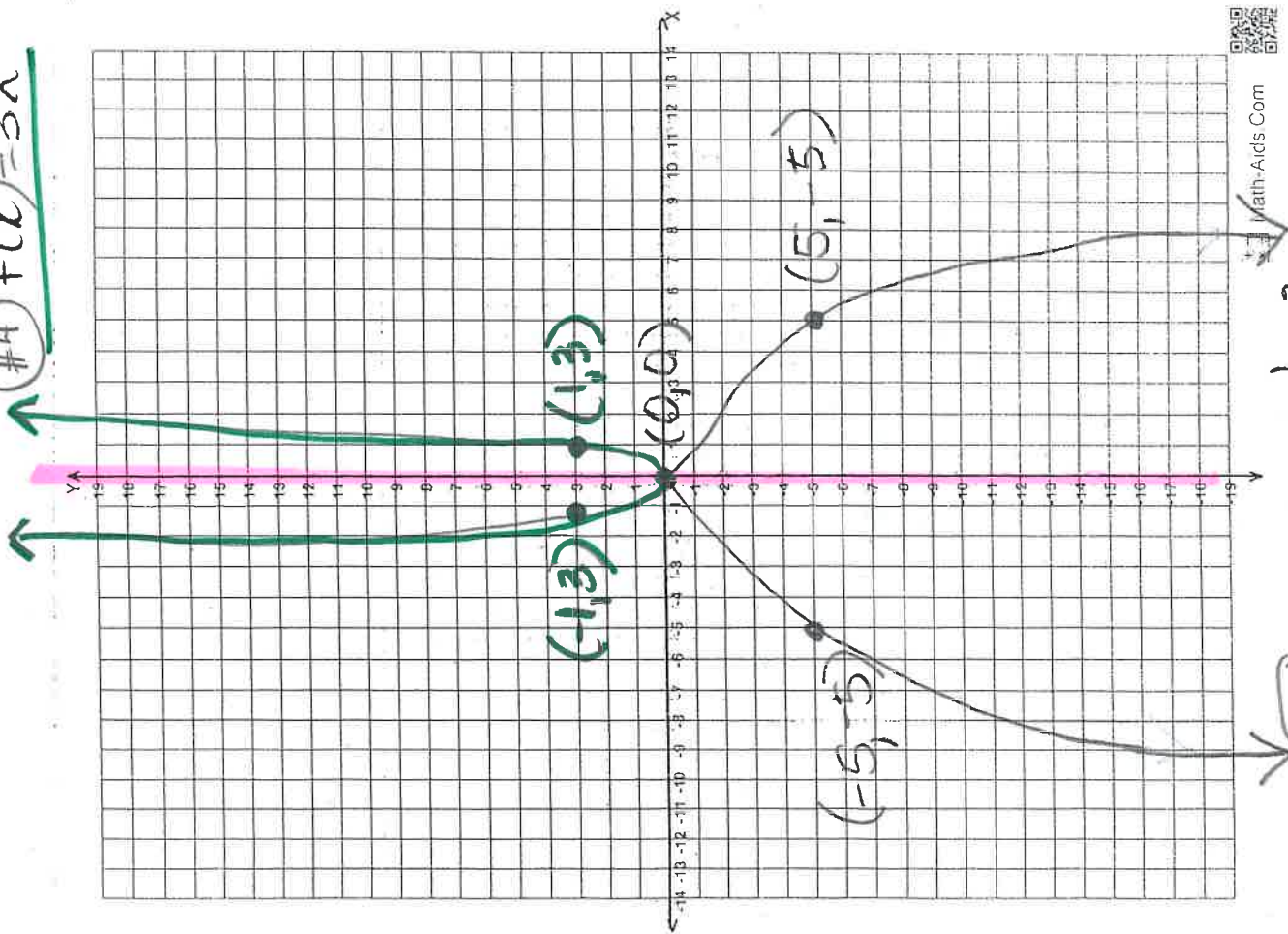
15. $f(x) = -3x^2 - 4$

x	f(x)
1	-7
0	-4
-1	-7

16. $f(x) = 5x^2 - 10$

- SKIP -

#4 $f(x) = 3x^2$



#5 $f(x) = -\frac{1}{5}x^2$

