

Taking a Closer Look!

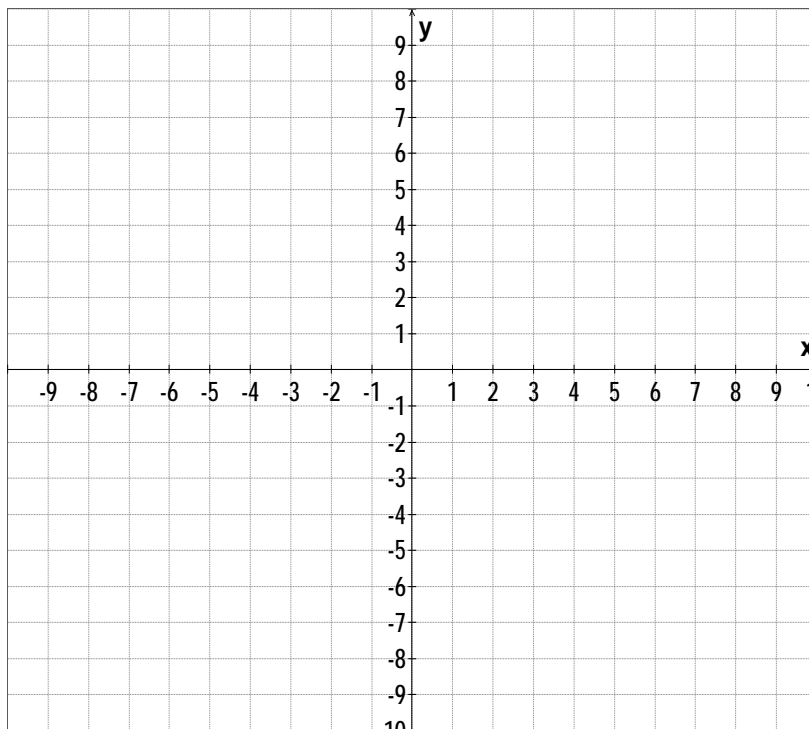
Name _____

Directions: Give answers in interval notation when possible. If a concept does not apply, write "none".



Graph:

$$y = \sqrt{x - 3}$$



1. Is it a function?

2. Domain:

3. Range:

4. x -intercept(s):

5. y -intercept(s):

6. Symmetry:

7. Where is the graph increasing?

8. Where is the graph decreasing?

9. Where is $y < 0$?

10. Where is $y > 0$?

11. Where is $y = 0$?

12. Find y when $x = 7$.

13. For what x -value(s) is $y = 4$?

14. Absolute maximum value of graph:

15. Absolute minimum value of graph:

16. Relative maxima:

17. Relative minima:

18. Asymptote(s): (state equation(s))

19. Assuming $y = f(x)$:
as $x \rightarrow +\infty$, $f(x) \rightarrow$ _____

as $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

20. Name given to this graph: