SOLVING QUADRATIC EQUATIONS BY GRAPHING

1)

For the quadratic function $y = x^2 + 4x + 2$, a table is used to approximate the zeros of the function.

From the tables, identify the approximate zeros of the given function.

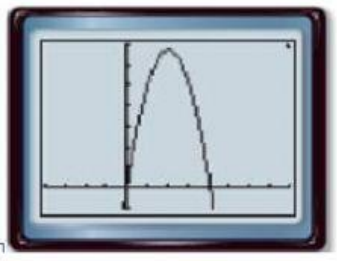
x	-3.9	-3.8	-3.7	-3.6	-3.5	-3.4	-3.3	-3.2	-3.1
y	1.61	1.24	0.89	0.56	0.25	-0.04	-0.31	-0.56	-0.79

x	-0.9	-0.8	-0.7	-0.6	-0.5	-0.4	-0.3	-0.2	-0.1
y	-0.79	-0.56	-0.31	-0.04	0.25	0.56	0.89	1.24	1.61

Approximate zeroes of the given function from the table are

and

2) **FOOTBALL** **A goalie kicks a ball with an upward velocity of 65 feet per second, and his foot meets the ball 1 foot off the ground. The quadratic function $h = -16t^2 + 65t + 1$ represents the height of the ball h in feet after t seconds. Approximately how long is the ball in the air?**



The ball is in the air approximately seconds

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