## Graphing Quadratic Equations with 2 variable - Example 3

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Example: Sketch the graph of:

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$y$-int
$x$-int
vertex

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Recall: To graph a quadratic, we need to find the important points:
$y$-int
$x$-int
$x=0$
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- Recall: To graph a quadratic, we need to find the important points:

$$
\begin{aligned}
& y \text {-int: }(0,5) \\
& x=0 \Rightarrow y=0^{2}+4 \cdot 0+5=5
\end{aligned}
$$

$$
x \text {-int }
$$

vertex

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$$
\begin{array}{ll}
y \text {-int: }(0,5) & x \text {-int } \\
x=0 \Rightarrow y=0^{2}+4 \cdot 0+5=5 & y=0 \\
\text { vertex }
\end{array}
$$

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& \text { vertex } \\
& h
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$h=\frac{-b}{2 a}=\frac{-4}{2 \cdot 1}$
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vertex
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