Intermediate Value Theorem Worksheets
\(\left.$$
\begin{array}{|c|c|}\hline \text { Generic Hypotheses } & \text { Our Specific Hypotheses } \\
\hline \text { the closed interval }[a, b] & \\
\hline \text { the function } f(x) & \\
\hline \begin{array}{c}\text { verification that } f \text { is continuous on the } \\
\text { closed interval }[a, b] .\end{array}
$$ \& \\
\hline the value of f(a) \& \\
\hline the value of f(b) \& \\

\hline confirmation that f(a) \neq f(b) \& Our Specific Conclusion\end{array}\right]\)| the real number " $y$ " |
| :---: |
| verification that $y$ is between $f(a)$ and $f(b)$ |
| Generic Conclusion |
| "There exists at least one number $c$ in |
| the open interval $(a, b)$ |
| such that $f(c)=y . "$ |


| Generic Hypotheses | Our Specific Hypotheses |
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| the function $f(x)$ |  |
| verification that $f$ is continuous on the <br> closed interval $[a, b]$. |  |
| the value of $f(a)$ |  |
| the value of $f(b)$ |  |
| confirmation that $f(a) \neq f(b)$ | Our Specific Conclusion |
| the real number " $y$ " | "There exists at least one number $c$ in |
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