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| --- | --- |
| **Fill in the Blanks** | **Maximum and Minimum Points** |

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| --- | --- | --- | --- | --- | --- |
| **Equation of Curve** | $$\frac{dy}{dx}$$ | $$\frac{dy}{dx}=0$$ | $x$**-coordinate** | $y$**-coordinate** | **Maximum or Minimum Point** |
| $$y=x^{2}-10x+2$$ |  |  |  | $$y=-23$$ | $$Minimum$$ |
| $$y=3x^{2}+12x+20$$ |  |  |  |  |  |
| $$y=15-2x-x^{2}$$ |  |  |  |  |  |
| $$y=3+8x-2x^{2}$$ |  |  |  |  |  |
| $$y=x^{2}+12x+ $$ |  |  |  | $$y=-6$$ | $$Minimum$$ |
| $$y=x^{2} - 9x+ $$ |  |  |  | $$y=-\frac{21}{4}$$ |  |
| $$y=x^{2}- x+15$$ |  |  | $$x=4$$ |  |  |
| $$y= + x-x^{2}$$ |  |  | $$x=2$$ | $$y=10$$ |  |