Fill In The Blanks…

**Using the Quadratic Formula**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Quadratic Equation** | $a, b$ **and** $c$ | $$b^{2}-4ac$$ | $$x=\frac{-b+\sqrt{b^{2}-4ac}}{2a}$$ | $$x=\frac{-b-\sqrt{b^{2}-4ac}}{2a}$$ | **Solutions to 3sf** |
| $$x^{2}+5x+1=0$$ | $$a=1, b=5, c=1$$ | $$5^{2}-4×1×1$$$$=21$$ | $$x=\frac{-5+\sqrt{21}}{2}$$ | $$x=\frac{-5-\sqrt{21}}{2}$$ |  |
| $$2x^{2}+5x+1=0$$ | $$a=2, b=5, c=1$$ | $$5^{2}-4×2×1$$$$=17$$ |  |  |  |
| $$2x^{2}-5x+1=0$$ | $$a=2, b=-5, c=1$$ | $$(-5)^{2}-4×2×1$$$$=17$$ | $$x=\frac{5+\sqrt{17}}{4}$$ |  |  |
| $$x^{2}-7x+3=0$$ |  |  |  |  |  |
| $$2x^{2}-7x+3=0$$ |  |  |  |  |  |
| $$5x^{2}+x-2=0$$ |  |  |  |  |  |
|  | $$a=3, b=5, c=2$$ |  |  |  |  |
|  |  |  | $$x=\frac{-9+\sqrt{89}}{4}$$ | $$x=\frac{-9-\sqrt{89}}{4}$$ |  |