**Quadratic Formula Homework**

|  |  |  |
| --- | --- | --- |
| **Literacy**quadratic, substitute, formula, equation, solve, roots | **Research**Find out what the discriminant is and what it is used for. | **Memory**Memorise the formula$$x=\frac{-b\pm \sqrt{b^{2}-4ac}}{2a}$$ |
| **Skills**

|  |
| --- |
| Use the quadratic formula to solve the following equations. Where necessary, round your answers to one decimal place. |
| 1. $ x^{2}-3x+2=0$
 |
| 1. $x^{2} + 7x + 5 = 0$
 |
| 1. $2x^{2} - 5x - 3 = 0$
 |
| 1. $x^{2} -10x+ 25 = 0$
 |

 | **Stretch**Use the quadratic formula to solve the following equations. Where necessary, round your answers to one decimal place.1. $ 2a^{2} – 6 = 3a$
2. $ 3(x + 1) = x^{2} – x$
3. $5 = 2x(x – 1)$
 |

**Answers**

Skills

1. 2 and 1
2. - 6.2 and -0.8
3. 3 and -0.5
4. 5 (repeated root)

Stretch

1. 2.6 and -1.1
2. 4.6 and -0.6
3. 2.2 and -1.2