**Quadratic Sequences GREEN**

**Stage One**

Calculate the $n^{th}$ terms of the following sequences:

**1)** 5, 11, 21, 35, 53

**2)** 1, 10, 25, 46, 73

**3)** 6, 12, 22, 36, 54

**4)** 0, 3, 8, 15, 24

**5)** 4, 16, 36, 64, 100



**Stage Two**

Calculate the $n^{th}$ terms of the following sequences:

**1)** 6, 17, 34, 57, 86

**2)** 3, 18, 41, 72, 111

**3)** 7, 14, 23, 34, 47

**4)** 8, 19, 34, 53, 76

**5)** 2, 12, 30, 56, 90

**Quadratic Sequences AMBER**

**Stage One**

1) Calculate the first difference.

2) Calculate the second difference.

3) How many $n²$s?

4) Subtract.

5) Write the quadratic $n^{th}$ term.

Calculate the $n^{th}$ terms of the following sequences:

**1)** 5, 11, 21, 35, 53

**2)** 1, 10, 25, 46, 73

**3)** 6, 12, 22, 36, 54

**4)** 0, 3, 8, 15, 24

**5)** 4, 16, 36, 64, 100



**Stage Two**

Calculate the $n^{th}$ terms of the following sequences:

1) Calculate the first difference.

2) Calculate the second difference.

3) How many $n²$s?

4) Subtract.

5) Calculate the $n^{th}$ term of the difference.

6) Write the quadratic $n^{th}$ term.

**1)** 6, 17, 34, 57, 86

**2)** 3, 18, 41, 72, 111

**3)** 7, 14, 23, 34, 47

**4)** 8, 19, 34, 53, 76

**5)** 2, 12, 30, 56, 90

**Quadratic Sequences RED**

**Stage One**

1) Calculate the first difference.

2) Calculate the second difference.

3) How many $n²$s?

4) Subtract.

5) Write the quadratic $n^{th}$ term.

Calculate the $n^{th}$ terms of the following sequences:

**1)** 5, 11, 21, 35, 53



 6 10 14 18



 4 4 4

**2)** 1, 10, 25, 46, 73



**3)** 6, 12, 22, 36, 54

**4)** 0, 3, 8, 15, 24

**5)** 4, 16, 36, 64, 100



**Stage Two**

Calculate the $n^{th}$ terms of the following sequences:

1) Calculate the first difference.

2) Calculate the second difference.

3) How many $n²$s?

4) Subtract.

5) Calculate the $n^{th}$ term of the difference.

6) Write the quadratic $n^{th}$ term.

**1)** 6, 17, 34, 57, 86



 11 17 23 29

**2)** 3, 18, 41, 72, 111

**3)** 7, 14, 23, 34, 47

**4)** 8, 19, 34, 53, 76

**5)** 2, 12, 30, 56, 90