

**Expansion****Further/Expansion****Binomial Expansion**

1. expand  $(x + 3)^4$

2. expand  $(6 + c)^5$

3. expand  $(x + 5)^4$

4. expand  $(4 + u)^5$

5. expand  $(x + 2)^4$

6. expand  $(u + 1)^4$

7. expand  $(3 + x)^5$

8. expand  $(2 + x)^5$

9. expand  $(5 + u)^5$

10. expand  $(x + 4)^4$

**Answers****Expansion****Further/Expansion****Binomial Expansion**

1.  $x^4 + 12x^3 + 54x^2 + 108x + 81$

2.  $7776 + 6480c + 2160c^2 + 360c^3 + 30c^4 + c^5$

3.  $x^4 + 20x^3 + 150x^2 + 500x + 625$

4.  $1024 + 1280u + 640u^2 + 160u^3 + 20u^4 + u^5$

5.  $x^4 + 8x^3 + 24x^2 + 32x + 16$

6.  $u^4 + 4u^3 + 6u^2 + 4u + 1$

7.  $243 + 405x + 270x^2 + 90x^3 + 15x^4 + x^5$

8.  $32 + 80x + 80x^2 + 40x^3 + 10x^4 + x^5$

9.  $3125 + 3125u + 1250u^2 + 250u^3 + 25u^4 + u^5$

10.  $x^4 + 16x^3 + 96x^2 + 256x + 256$