

## **BINOMIALS**

**1. Multiply the following binomials.**

<b>a)</b> $(k + 3)(k + 2) =$	<b>b)</b> $(g + 4)(g - 3) =$
<b>c)</b> $(t - 5)(t + 4) =$	<b>d)</b> $(v - 3)(v + 7) =$
<b>e)</b> $(3 + m)(1 + m) =$	<b>f)</b> $(d - 3)(d - 4) =$
<b>g)</b> $(2n + 3)(n + 2) =$	<b>h)</b> $(3k + 2)(k - 3) =$
<b>i)</b> $(2a + 7)(2a + 3) =$	<b>j)</b> $(2h + 3)(3h - 1) =$
<b>k)</b> $(2e - 1)(3e + 4) =$	<b>l)</b> $(q - 1)^2 =$
<b>m)</b> $(r + 3)^2 =$	<b>n)</b> $(v - 5)^2 =$
<b>o)</b> $(2g + 1)^2 =$	<b>p)</b> $(2h - 5)^2 =$
<b>q)</b> $(2w - 7)^2 =$	<b>r)</b> $(a + 3)(a - 3) =$
<b>s)</b> $(2h + 3)(2h - 3) =$	<b>t)</b> $(3p + 5q)(3p - 5q) =$
<b>u)</b> $(5t + v)(5t - v) =$	<b>v)</b> $(3t - 5)(t + 2) =$
<b>w)</b> $(3u - 4)(2u - 5) =$	<b>x)</b> $(n - 5)(4n + 7) =$
<b>y)</b> $(2q - 5)(3q + 5) =$	<b>z)</b> $(3w + 7z)^2 =$

**2. Simplify.**

<b>a)</b> $(k + 3)(k + 2) + 3(k + 4) =$	<b>b)</b> $(m + 3)(m - 2) + 4(m + 2) =$
<b>c)</b> $(h - 3)(h - 2) + 3(h - 1) =$	<b>d)</b> $(x - 4)(x + 2) - 2(x + 1) =$
<b>e)</b> $2(q + 5)(q + 2) =$	<b>f)</b> $3(n - 3)(n + 4) =$
<b>g)</b> $2(c - 3)(c - 4) =$	<b>h)</b> $-2(y + 2)(y + 4) =$
<b>i)</b> $-4(z + 3)(z - 4) =$	<b>j)</b> $(a + 5)(a - 3) + 3(a + 4)(a - 3) =$
<b>k)</b> $2(2c + 1)(c - 2) + (3c + 1)(c - 1) =$	<b>l)</b> $(k + 2)(k + 3) - 2(k + 3)(k - 4) =$
<b>m)</b> $(n - 2)(2n - 1) + 3(n + 2)(2n + 1) =$	<b>n)</b> $3(2x + 3)(2x - 1) - 2(x + 3)(x + 2) =$

<b>o)</b> $2(a + 3)^2 =$	<b>p)</b> $3(m - 2)^2 =$
<b>q)</b> $-2(m - 4)^2 =$	<b>r)</b> $-(x + 3)^2 =$
<b>s)</b> $-(x - 5)^2 =$	<b>t)</b> $(k + 3)^2 + (k + 2)^2 =$
<b>u)</b> $(h - 2)^2 + (h - 3)^2 =$	<b>v)</b> $(2x + 1)^2 + (x + 2)^2 =$
<b>w)</b> $2(y - 2)^2 + 3(y + 3)^2 =$	<b>x)</b> $3(z - 1)^2 + 2(z - 2)^2 =$
<b>y)</b> $3(t - 1)^2 - 2(t + 1)^2 =$	<b>z)</b> $(t - 3)^2 - 3(t + 1)^2 =$
<b>aa)</b> $2(v - 3)^2 - 2(v + 2)(v - 3) =$	<b>bb)</b> $2(m - 3)^2 + 3(m - 3)(m + 2) =$
<b>cc)</b> $3(x + 3)(x - 3) - (x + 3)^2 =$	<b>dd)</b> $-(y + 3)^2 - 2(y - 3)(y + 3) =$