1 Expand each bracket. Each one has three terms inside.

(a) $8(3a - 2b + 6)$ (1)

(b) $2(x + y + 5)$ (1)

(c) $3(2m - n - 4)$ (1)

(d) $5(p + 3q - 2)$ (1)

(4 marks)

2 Expand and then simplify.

(a) $3(x + 4) + 2x$ (1)

(b) $2(y + 5) + 3y$ (1)

(c) $4(a + 1) + 7$ (1)

(d) $5(2b + 3) + b$ (1)

(4 marks)

3 Expand and then simplify.

(a) $3(2x + 1) + 2(x + 4)$ (1)

(b) $4(a + 3) + 2(a + 1)$ (1)

(c) $5(m + 2) + 3(2m + 1)$ (1)

(d) $2(3y + 4) + 4(y + 2)$ (1)

(4 marks)

4 Write an expression for the area of each rectangle, expanded.

(a) Height 3, width $b - 2$ (1)

(b) Height 5, width $3c - 1$ (1)

(c) Height 4, width $\frac{d}{2} - 3$ (1)

(d) Height 6, width $2e + 5$ (1)

(4 marks)

5 A rectangle has height 10 and a perimeter of $8x + 16$.

(a) Write an expression for the sum of the two heights (1)

(b) Write an expression for the sum of the two widths (2)

(c) Write an expression for one width (1)

(d) Write an expression for the area of the rectangle, expanded (2)

(6 marks)

6 Expand and then simplify.

(a) $4(2x + 3) - x$ (1)

(b) $6(a + 2) - 5$ (1)

(c) $3(4m + 1) - 2m$ (1)

(d) $2(5y + 6) - 3y - 4$ (1)

(4 marks)