

**ALGEBRA REVIEW**

**1. Simplify**

(a)  $a + 3a + 3b - 2a + b$

.....

(b)  $5p + 4p^2 - 7p + 2p + 5p^2$

.....

**2. Expand the following brackets**

(a)  $3(x + 4)$

.....

(b)  $4x(2 + 3x)$

.....

(c)  $x(x + 2y + 3)$

.....

**3. Factorise the following expressions**

(a)  $2x + 6$

.....

(b)  $4p - 12p^2$

.....

(c)  $12m^2 - 18m$

.....

**4. Expand the following**

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

.....

(b)  $(x + 3)^2$

.....

(c)  $(x + 5)(x - 5)$

.....

**5. Use the difference of two squares to factorise (double brackets)  $a^2 - 36$**

.....

**6. Simplify the following expressions with indices**

(a)  $x^2 \times x^3$

.....

(b)  $3y \times 5y^2$

.....

(c)  $5ab^3 \times 4a^2b$

.....

**7. Simplify these expressions with indices**

(a)  $x^5 \div x^2$

.....

(b)  $8y^4 \div 4y$

.....

(c)  $\frac{24x^3y^2}{8x^2}$

.....