1. Evaluate

$$3^5; \quad 4^4; \quad 2^9$$

2. Evaluate

$$7^{-3}; \quad 4^{-4}$$

3. Evaluate

$$125^{4/3}$$

;

$$243^{-2/3}$$

4. Write an alternate expression for:
   1. a x a x a x a

   2.
$$\sqrt[3]{a^5}$$

5. Expand

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

; (x-7)(x-10) ;

$$(x^2-2x-1)(x^2-4x-3)$$

6. Simplify this expression:

$$4x-2[5y-x+3(2x-y)]$$

7. Expand the following factors
1. (x+1)(x-2)
2. 4x(x-2)

8. Factorize these quadratics

1. $$2x^2+11x+5$$

2. $$8x^2-6x+1$$

9. Evaluate using the difference of squares

1. $$x^2-144$$

2. $$25x^2-16$$

10. Complete the square or otherwise factor the following

1. $$x^2-22x+121$$

2. $$3x^2-x$$