1. What is the base and the index of 8^4?

        Base =   Index =

2. Write down the following products using index notation.

    i. $2 \times 2 \times 2 \times 2 =$

    ii. $4 \times 4 =$

    iii. $7 \times 7 \times 5 \times 5 = \quad \times$

    iv. $2 \times 2 \times 2 \times 3 \times 3 \times 5 = \quad \times \quad \times$

    v. $2 \times 3 \times 3 \times 2 \times 5 \times 2 \times 3 \times 5 = \quad \times \quad \times$

3. Fill in the blanks.

    i. $25 = 5$ ii. $36 = 6$ iii. $\quad = 8^2$ iv. $125 = 5$

    v. $\quad = 10^3$ vi. $\quad = 4^3$ vii. $\quad = 12^2$

4. Find the value of each of the following expressions.

    Ex. $2^3 \times 3^2 = 2 \times 2 \times 2 \times 3 \times 3$

                     $8 \quad \times \quad 9 = 72$

    i. $2^4 \times 3^2 =$ ii. $3^2 \times 5^2 =$ iii. $12^2 \times 1^2 =$

    iv. $2^3 \times 5^2 \times 4 =$ v. $3^3 \times 5^2 \times 2 =$

5. Write down 256

    i. As a power of 2 =   ii. As a power of 4 =

6. Fill in the blanks appropriately with either the symbol "<" or ">".

i. 2^4 ….. 3^2 ii. 5^2 ….. 4^2 iii. 6^2 ….. 41   iv. 8^2 ….. 9^2