USING EXPONENTS (POWERS) SHEET 1

Work out these exponents - remember the exponent is the number of times you need to multiply the number by itself.

Examples:

$5^2 = 5 \times 5 = 25$ $2^4 = 2 \times 2 \times 2 \times 2 = 16$ $10^3 = 10 \times 10 \times 10 = 1000$

1) $3^2 = 3 \times 3 = $ ____   2) $2^3 = 2 \times 2 \times 2 = $ ____   3) $6^2 = 6 \times 6 = $ ____

4) $9^2 = $ __ $\times$ __ $= $ ____   5) $3^3 = $ __ $\times$ __ $\times$ __ $= $ ____   6) $7^2 = $ __ $\times$ __ $= $ ____

Use a calculator to work out these exponents below:

7) $4^3 = $ __ $\times$ __ $\times$ __ $= $ ____   8) $2^5 = $ __ $\times$ __ $\times$ __ $\times$ __ $\times$ __ $= $ ____

9) $5^4 = $ __ $\times$ __ $\times$ __ $\times$ __ $= $ ____   10) $9^3 = $ __ $\times$ __ $\times$ __ $= $ ____

11) $3^5 = $ _____   12) $7^4 = $ _____   13) $10^5 = $ _____

14) $2^7 = $ _____   15) $9^5 = $ _____   16) $16^3 = $ _____

17) $6^1 = $ _____   18) $5^6 = $ _____   19) $78^2 = $ _____

Work out these exponents, then put them in order, from smallest to largest.

5^6 2^9 6^4 9^3 10^4 7^5

_____   _____   _____   _____   _____   _____

Smallest   Largest