## 1.5 Homework

## GCSE (Year 9) Mathematics Index Form

## Do NOT use a calculator

For each question;

- (**a**) Write the answer as a single power
- (**b**) Write your part (**a**) answer without any power.
- (i)  $2^3 \times 2^3$  (ii)  $3^2 \times 3^2$
- (a) \_\_\_\_\_ (a) \_\_\_\_\_
- (b) \_\_\_\_\_ (b) \_\_\_\_\_

- (iii)  $5^2 \times 5$  (iv)  $\frac{7^7}{7^5}$
- (a) \_\_\_\_\_ (a) \_\_\_\_\_ (b) \_\_\_\_\_ (b) \_\_\_\_\_

- (v)  $10^4 \times 10^3$  (vi)  $6 \times 6 \times 6$ (a) \_\_\_\_\_ (a) \_\_\_\_
- (b) \_\_\_\_\_ (b) \_\_\_\_\_

(vii) 
$$\frac{10^7}{10^3}$$
 (viii)  $(2^3)^2$ 



(ix) 
$$\frac{5 \times 5 \times 5 \times 5 \times 5}{5 \times 5 \times 5}$$
 (x)  $(2^2)^5$ 

 $(xi) \sqrt{10^6}$  (xii)  $8^8 \div 8^6$ 

( <b>a</b> )	 ( <b>a</b> )	
( <b>b</b> )	 ( <b>b</b> )	

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Teachers may obtain detailed worked solutions to the exercises by email from mhh@shrewsbury.org.uk