

## Home groups task

## SUMMARY EXPONENT RULES

In a **product of powers** with the same \_\_\_\_\_  
you leave the same \_\_\_\_\_ and \_\_\_\_\_ the exponents

$$a^x \cdot a^y = a^{x \dots y}$$

Example: \_\_\_\_\_

In a **division of powers** with the same \_\_\_\_\_  
you leave the same \_\_\_\_\_ and \_\_\_\_\_ the exponents

$$a^x : a^y = a^{x \dots y}$$

Example: \_\_\_\_\_

In a **power of another power**  
you leave the same \_\_\_\_\_ and \_\_\_\_\_ the exponents

$$(a^x)^y = a^{x \dots y}$$

Example: \_\_\_\_\_

In a **power of a product** you raise each factor to the same  
\_\_\_\_\_ and then you \_\_\_\_\_ the powers

$$(a \cdot b)^x = a^{\dots} \cdot b^{\dots}$$

Example: \_\_\_\_\_