

**LITERACY**

N P X S O S I E E R

Unscramble the two sets of letters and describe the words related to this topic!

I P M Y S F L I

**RESEARCH**

Research what it means to **factorise** expressions and how it might relate to this homework moving forward in the topic.

**MEMORY**

Remember when we multiply algebraic expressions we add the powers!

e.g.  $2x^2 \times 4x^3 = 8x^5$

Remember that when there is no powers we have a 'secret 1'

e.g.  $2x$  can also be written as  $2x^1$

So  $2x^1 \times 5x^2 = 10x^3$

**SKILL**

1. Simplify the following expressions:

a)  $5x - 2x$       b)  $8y + 3y$       c)  $13a - 4a$       d)  $4h + 7h$

2. Simplify the following expressions:

a)  $5x^2 \times 2x^2$       b)  $7y^2 \times 2y$       c)  $10a^3 \times 7a^2$       d)  $4h^3 \times 9h^3$

3. Expand the following brackets:

a)  $2(x+3)$       b)  $4(y-3)$       c)  $5(4a-3)$       d)  $-6(2h+5)$

4. Expand the following brackets:

a)  $x(x+4)$       b)  $2y(y-3)$       c)  $-4a(2a+7)$       d)  $3h(2h^2-7)$

**STRETCH**

1. Simplify the following expressions

a)  $3ab \times 4b$

b)  $5a^2b \times 3a^2b$

2. Expand and simplify the following brackets:

a)  $2ab(3b - 5)$

b)  $4ab(2a^2b + 8b)$