

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. $2x^2 \times 4x^3 = 8x^6$

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