

SIMPLIFY AND WRITE YOUR ANSWER ALGEBRAICALLY:

i) $\left(\begin{array}{|c|c|} \hline \text{orange} & \text{orange} \\ \hline \end{array} \right) + \left(\begin{array}{|c|} \hline \text{red} \\ \hline \end{array} \right) =$

ii) $\left(\begin{array}{|c|c|} \hline \text{orange} & \text{orange} \\ \hline \end{array} \right) - \left(\begin{array}{|c|c|} \hline \text{red} & \text{orange} \\ \hline \end{array} \right) =$

iii) $\left(\begin{array}{|c|c|} \hline \text{orange} & \text{orange} \\ \hline \end{array} \right) - \left(\begin{array}{|c|c|} \hline \text{yellow} & \text{red} \\ \hline \end{array} \right) =$

iv) $\left(\begin{array}{|c|c|} \hline \text{orange} & \text{orange} \\ \hline \end{array} \right) + \left(\begin{array}{|c|} \hline \text{yellow} \\ \hline \end{array} \right) =$

CONSIDER THE EQUATION, WHAT IS THE CONSTANT TERM FOR EACH EXPRESSION?

i) $8x^6 - x^2 + 11$ Constant:

ii) $8x^6 - (3x - 10)$ Constant:

iii) $x^6 - 5y^4 - 9x^2 - 8x$ Constant:

CONSIDER THE EXPRESSIONS, WHAT IS THE DEGREE?

i) $5a^3b^2 - 9b^2c^4 - 8a^3b^2c^2$ Degree:

ii) $5ab^2 - 9b^2c - 8ab^2c$ Degree:

iii) $a^3b - 5^3ab^2 + 9a^2b^2c$ Degree:

SIMPLIFY THE EQUATION:

$\left(\begin{array}{|c|c|c|c|c|} \hline \text{orange} & \text{orange} & \text{orange} & \text{orange} & \text{orange} \\ \hline \end{array} \right) + \left(\begin{array}{|c|c|c|} \hline \text{red} & \text{red} & \text{orange} \\ \hline \end{array} \right)$

CONSIDER THE EXPRESSIONS, WHAT ARE THE COEFFICIENTS?

i) $a^3b - 9a^2c - 8c + 4$ Coefficients:

ii) $-5ab^2 - 2^3c - (2a + 4)$ Coefficients:

SIMPLIFY THE EQUATION:

$(5x^2 - 9x + 3) + (4x^2 + 4x - 12)$

a) $9x^2 + 5x - 9$ d) $9x^2 - 13x - 9$

b) $9x^2 - 5x + 15$ e) $9x^2 - 13x + 9$

c) $9x^2 - 5x - 9$

ANSWER:

SIMPLIFY THE EQUATION:

$x - [7 - (x - 2)]$

a) $2x + 9$ b) $2x - 9$ c) $9 - 2x$ d) $9 + 2x$ e) $2x - 5$

ANSWER:

SIMPLIFY THE EXPRESSION:

$\left(\begin{array}{|c|c|c|} \hline \text{yellow} & \text{yellow} & \text{yellow} \\ \hline \end{array} \right) - \left(\begin{array}{|c|c|c|} \hline \text{red} & \text{red} & \text{red} \\ \hline \end{array} \right)$

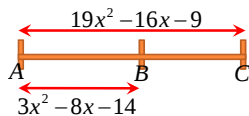
a) $10x^2 + 3x - 2$ d) $4x^2 + 3x - 6$

b) $4x^2 - 3x + 6$ e) $10x^2 - 13x + 6$

c) $10x^2 - 3x + 6$

ANSWER:

GIVEN THE DIAGRAM, HOW LONG IS BC?



- a) $16x^2 - 8x - 5$ d) $16x^2 - 8x + 5$
 b) $16x^2 - 24x + 5$ e) $22x^2 - 19x - 23$
 c) $-16x^2 + 8x - 5$

ANSWER:

MULTIPLY AND SIMPLIFY:

$$4(3x^2 - 4x + 5)$$

- a) $12x^8 - 16x^4 + 20$ d) $12x^2 - 16x + 20$
 b) $36x^2 - 16x + 20$ e) $12x^2 - 16x + 5$
 c) $12x^2 - 4x + 20$

ANSWER:

DIVIDE AND SIMPLIFY THE EQUATION:

$$\frac{-15x^4 - 21x + 9}{-3}$$

- a) $5x^4 - 7x - 3$ d) $-5x^4 + 7x - 3$
 b) $5x^4 + 7x - 3$ e) $-5x^4 + 7x + 3$
 c) $-12x^4 - 18x + 12$

ANSWER:

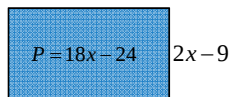
THE DIAGRAM COULD VISUALLY DESCRIBE WHICH OF THE FOLLOWING PRODUCTS

$6x^2$	$10x$
$9x$	15

- a) $(3x+5)(2x+3)$ d) $(3x+1)(2x+15)$
 b) $(2x+5)(3x+3)$ e) $(3x+15)(2x+1)$
 c) $(6x+5)(x+3)$

ANSWER:)

THE PERIMETER AND WIDTH OF THE RECTANGLE IS GIVEN. WHAT IS THE LENGTH?



- a) $7x+3$ b) $-7x+3$ c) $7x-3$ d) $16x-15$ e) $16x+15$

ANSWER:

MULTIPLY AND SIMPLIFY:

$$3(5x^2 - 2x + 7)$$

- a) $15x^2 - 6x + 21$ d) $225x^2 - 6x + 7$
 b) $15x^6 - 6x^3 + 21$ e) $8x^2 + x + 10$
 c) $225x^2 - 6x + 21$

ANSWER:

THE DIAGRAM COULD VISUALLY DESCRIBE WHICH OF THE FOLLOWING PRODUCTS

$4x^2$	$16x$
$3x$	12

- a) $(2x+3)(2x+4)$ d) $(x+3)(4x+4)$
 b) $(4x+3)(x-4)$ e) $(x+3)(3x+4)$
 c) $(x+4)(4x+3)$

ANSWER:)

GIVEN THE EQUATION, WHAT IS THE VALUE OF "B"?

$$(2x-5)(x+3) = Ax^2 + Bx + C$$

- a) $-x$ b) -2 c) -1 d) 1 e) 2

ANSWER: