Questions

Q1.

Expand and simplify $5(p + 3) - 2(1 - 2p)$

.....

(Total for question = 2 marks)

(**Q20 1MA1/3F, June 2018**)

Q2.

Expand and simplify $(m + 7)(m + 3)$

.....

(Total for question = 2 marks)

(**Q02 1MA1/1H/N, Specimen papers**)

Q3.

Expand and simplify $(x + 3)(x - 1)$

.....

(Total for question is 2 marks)

(**Q27 1MA1/1F/S1, Specimen papers**)

Q4.

Expand and simplify $(x - 2)(3x + 2)(2x + 3)$

.....

(Total for question = 3 marks)

(**Q12 1MA1/2H, Nov 2021**)

Q5.

Expand and simplify $(3x + 2)(2x + 1)(x - 5)$

.....

(Total for question = 3 marks)

(**Q15 1MA1/2H, Nov 2019**)

Q6.

Show that $(x + 1)(x + 2)(x + 3)$ can be written in the form $ax^3 + bx^2 + cx + d$ where a, b, c and d are positive integers.

(Total for question = 3 marks)

(**Q10 1MA1/1H, June 2017**)

Q7.

Amzol thinks that $(x + 5)^2 = x^2 + 25$ for all values of x.

Is Amzol right?
You must show how you get your answer.

(Total for question = 2 marks)

(**Q19 1MA1/3F/M1, Specimen papers**)

Q8.

Expand and simplify $(x + 7)(x - 2)(x + 3)$

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(Total for question = 3 marks)

(**Q09 1MA1/2H, Nov 2023**)

Q9.

Expand and simplify $(x + 2)(x + 8)(x – 4)$

.....

(Total for question = 3 marks)

(**Q11 1MA1/3H/M3, Specimen papers**)

Q10.

Show that

$$(3x - 1)(x + 5)(4x - 3) = 12x^3 + 47x^2 - 62x + 15$$

for all values of x.

(Total for question is 3 marks)

(**Q13 1MA1/2H/S1, Specimen papers**)

Q11.

Show that $(x - 1)(x + 3)(x - 5)$ can be written in the form $ax^3 + bx^2 + cx + d$ where a, b, c and d are integers.

(Total for question = 3 marks)

(**Q12 1MA1/3H, June 2023**)

Q12.

Maryam is trying to expand and simplify $(n - 2)^2$
Here is her working.

$$(n - 2)^2 = (n - 2)(n - 2)$$
$$= n^2 - 2n - 2n - 4$$
$$= n^2 - 4n - 4$$

Maryam's answer is wrong.

(a) Find Maryam's mistake.

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(1)

Josh is trying to factorise $x^2 - 6x + 8$
His reasoning is,

because $4 \times 2 = 8$
and $4 + 2 = 6$

then $x^2 - 6x + 8 = (x + 4)(x + 2)$

(b) Explain what is wrong with Josh's reasoning.

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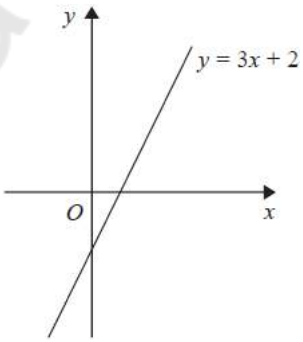
(1)

Shona has to draw the line with equation $y = 3x + 2$
Here is her line.



(c) Explain why Shona's line **cannot** be correct.

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(1)

(Total for question = 3 marks)

(**Q05 1MA1/3H/M3, Specimen papers**)

Q13.

Expand and simplify $(3x - 1)(2x + 3)(x - 5)$

.....

(Total for question = 3 marks)

(**Q14 1MA1/1H, June 2024**)