PART - B

❖ Answer all questions

01. There are 30 edges and 12 faces in a solid
    (i) Find the number of vertices of it using the Euiler's relation.
    (ii) Name the solid above you obtained.
    (iii) If 12 vertices and 30 edges are there in a solid find the number of faces of it.
    (iv) Name the solid above.
    (v) If area of a face of above (iii) and (iv) part solid is $20cm^2$, find the total surface area of it.

02. (a) Multiples of 7 are started from 7
    (i) Write the general term of above number pattern.
    (ii) Which term is 147 of the above pattern
    (iii) Is 252 a term of the above pattern or not give reasons why?

    (b) 5n - 2 is the general term of a certain number pattern.
    (i) Find the first 3 terms of the pattern.
    (ii) Find the 12^{th} term of the pattern above.

03. (a) Factorise
    (i) 8a - 24b
    (ii) 15ab + 15ac - 40a
    (iii) 3p + 4pq - pr

    (b) Factorise
    (i) -9ax - 12xy
    (ii) Write the prime factors of 12

04. (a) Simplify using the number line

(i) (+5) + (-3)

(ii) (-4) + (-5)

(b) Simplify

(i) (+4) - (-5)

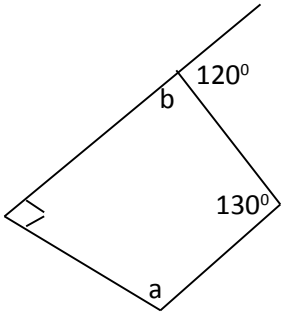
(ii) (-7) - (+3)

(c) Simplify

$$\frac{(-3)\times(+6)}{(-9)\times(-1)}$$

(d) Simplify (-6) - (-10) + (+3)

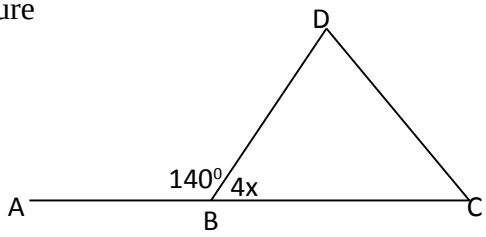
05. (a) Find the value of a and b



(b)

(i) Find the value of x

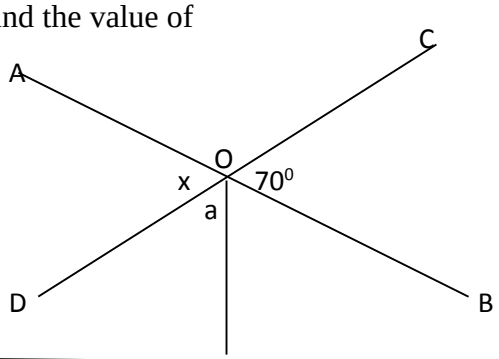
(ii) Write a pair of adjacent angles of the figure



(c) AB and CD straight lines are intersected at o, find the value of

(i) $A\hat{O}C$

(ii) "a" and x of the figure



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