15-07-21 THURSDAY C.W

Date
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CARDINALITY OF A SET:

The number of elements in a set is called its cardinal number.

EX: 1) $A = \{a, b, c, d\} = n(A) = 4$

2) $\phi = \{\ \} = n(\phi) = 0$

EXERCISE 10(E)

1. (i) $A = \{0, 1, 2, 4\} = n(A) = 4$

(ii) $B = \{-3, -1, 1, 3, 5, 7\} = n(B) = 6$

(iii) $C = \{\ \} = n(C) = 0$

(iv) $D = \{3, 2, 2, 1, 3, 1, 2\} = \{3, 2, 1\} = n(D) = 3$

(v) $E = \{$Natural no. between 15 and 20$\} = \{16, 17, 18, 19\} = n(E) = 4$

(vi) $E = \{$Whole nos. from 8 to 14$\} = \{8, 9, 10, 11, 12, 13, 14\} = n(F) = 7$

2. GIVEN: $A = \{$Natural nos. less than 10$\}$,
$B = \{$letters of the word 'PUPPET'$\}$
$C = \{$Squares of the first four whole nos.$\}$
$D = \{$Odd nos. divisible by 2$\}$

FIND: (i) $n(A) = 9$ (ii) $n(B) = 4$ (iii) $n(C) = 4$ (iv) $n(D) = 0$

3. (i) If $A = \{0\}$, then $n(A) = 0$ (T)
(ii) $n(\phi) = 1$ (F)
(iii) If $T = \{a, l, g, h, b, d, h\}$; then $n(T) = 5$ (T)

(iv) If $B = \{1, 5, 51, 15, 5, 1\}$ then $n(B) = 6$ (F)