Exercise 10 E

1. Write the cardinal number of each of the following sets:

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

v) $E = \{\text{Natural numbers between 15 and 20}\}$ $n(E) = 4$

vi) $F = \{\text{whole numbers from 8 to 14}\}$ $n(F) = 7$

2 Given:

$A = \{\text{Natural numbers less 10}\}$

$B = \{\text{Letters of the word PUPPET}\}$

$C = \{\text{Squares of the first four whole numbers}\}$

$D = \{\text{odd numbers divisible by 2}\}$

Find

i) $n(A) = 9$

(ii) $n(B) = 4$

(iii) $n(C) = 4$

(iv) $n(D) = 0$

3 State true or false for each of the following. Correct the wrong statement

(i) If $A = \{0\}$ then $n(A) = 0$ True

(ii) $n(\phi) = 1$ False $n(\phi) = 0$

(iii) If $T = \{a, 1, a, h, b, d, h\}$ then $n(T) = 5$ True

(iv) If $B = \{1, 5, 5, 15, 5, 1\}$ then $n(B) = 6$ False $n(B) = 4$