Assignment-1

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1-B[ICSE 2014]

find the values of x for which it satisfies the equation
-2$\frac{5}{6} \leq \frac{1}{2} - \frac{2x}{3} \leq 2$

SOLUTION

let us solve the equation
The equation is given by

$$-2\frac{5}{6} \leq \frac{1}{2} - \frac{2x}{3} \leq 2 \tag{1}$$
$$-\frac{17}{6} \leq -\frac{2x}{3} \leq 2 \tag{2}$$
$$-\frac{10}{3} \leq -\frac{2x}{3} \leq \frac{3}{2} \tag{3}$$

multiplying - on all the sides,

$$-\frac{3}{2} \leq \frac{2x}{3} \leq \frac{10}{3} \tag{4}$$
$$-\frac{9}{2} \leq 2x < 10 \tag{5}$$
$$-\frac{9}{4} \leq x < 5 \tag{6}$$

as x belongs to whole numbers we should consider our lower bound as 0
so values of x are : 0$\leq x < 5$