

FlexiPrep

NCERT Class 11 Mathematics Solutions: Chapter 6 – Linear Inequalities Miscellaneous Exercise Part 6 (For CBSE, ICSE, IAS, NET, NRA 2022)

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Addition property of inequalities:

If A

Subtraction property of inequalities:

If A

Multiplication property of inequalities:

If A

If A

Division property of inequalities:

If A

If A

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1. IQ of a person is given by the formula $IQ = \frac{MA}{CA} \times 100$, Where MA is mental age and CA is chronological age. If $80 \leq IQ \leq 140$ for a group of 12 years old children, find the range of their mental age.

Answer:

It is given that for a group of 12 years old children,

$$80 \leq IQ \leq 140 \dots \text{eq (i)}$$

For a group of 12 years old children, CA = 12 years

$$IQ = \frac{MA}{12} \times 100$$

Putting this value of IQ in (i) ,

$$80 \leq \frac{MA}{12} \times 100 \leq 140$$

$$\Rightarrow 80 \times \frac{12}{100} \leq MA \leq 140 \times \frac{12}{100}$$

$$\Rightarrow 9.6 \leq MA \leq 16.8$$

Thus, the range of mental age of the group of 12 years old children is

$$9.6 \leq MA \leq 16.8$$

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