Grade 9

Mathematics

Covid -19 – weekly school

March 1st week

axioms

statement which are considered to be self – evident and are accepted without proof are called axioms.

ABC = ACB

• Axiom $1 \rightarrow$ quantities which are equal to the same quantity are equal.

Ex -: AB = 15 cm	$ABC = 50^{\circ}$
	\wedge

BC = 15 cm
$$\overrightarrow{ACB} = 50^{\circ}$$

Do the exercise 7.1

AB = BC

Axiom 2 -> quantities are obtain by adding equal quantities to equal quantities are equal.



BC = DE BC + CD = DE + CD (by adding CD to both sides) There for, BD = CE

Do the exercise 7.2

Axiom 3 → quantities which are obtained by subtracting equal quantities from equal quantities are equal.



AD = CB

AD - CD = CB - CD (By subtracting CD from both sides of the equation)

AC = DB

- Do the exercise 7.3
- Axiom 3 \rightarrow product which are equal quantities multiplied by equals, are equal.
- Axiom 3 \rightarrow quantities which are equal quantities by nonzero equals are equal.

Ex-:



if AOB = BOC, COD = DOE and AOC = COE find the relationship between AOB and DOE. AOB = BOC (given) AOB = AOC — 1 2 AOB = AOC — 1 DOE = COE (given) AOC = COE (given, according to 1 and 2) AOB = DOE

Do the exercise 7.4