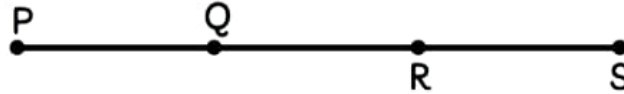


- 1 In last year, cyclone comes out in Andhra Pradesh. Due to this cyclone, many persons lost their lives and property. Deepak and Rohit decided to contribute equal amounts to National Disaster Relief Fund, so that the suffered person get some relief.



- (a) In this process, which axiom is used. Also write their statement.
(b) If Deepak contributed ₹30,000, then how much contribute the Rohit?
(c) In the given figure, if $PR = QS$, then prove that $PQ = RS$.



- 2 Rahul has a fantasy of collecting the old stamp. So, one day he went to collect old stamps from two different market stores of the Indira Nagar market. So, Rahul decides to take 3 from each store.

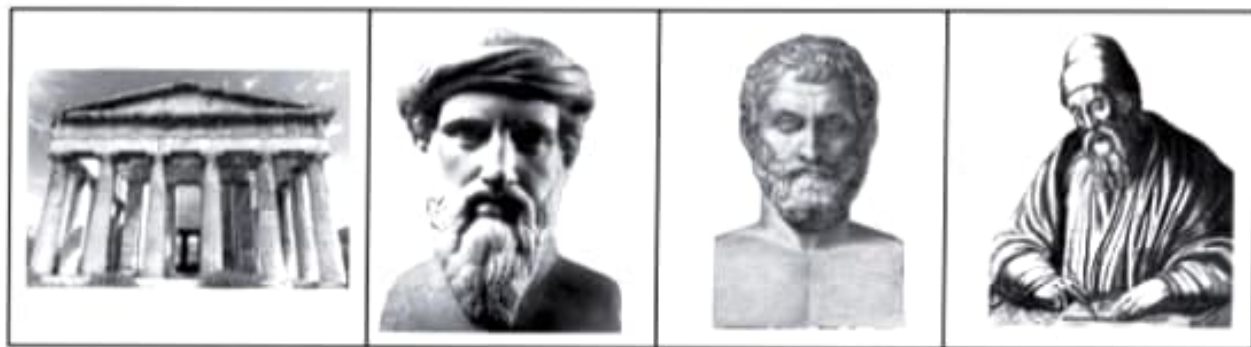


- (a) It is known that $a + b = 20$ and $a = c$. Show that $c + b = 20$.
(b) How many stamps remain with each store after Rahul's purchase?
(c) Solve the equation $y + 12 = 15$ and state the Euclid axiom used here.

Case Study Based Questions

Case Study 1

A National Public School organised an education trip to a museum. Almost all the students of class IX went to the trip with their teacher of Mathematics. They saw many pictures of mathematicians and read about their contributions in the field of Mathematics. After visiting the museum, teacher asked the following questions from the students.



On the basis of the above information, solve the following questions:

Q1. Pythagoras was a student of:

- a. Euclid
- b. Thales
- c. Archimedes
- d. Both a. and b.

Q2. Name of the mathematician who is visible in the last picture, is:

- a. Euclid
- b. Pythagoras
- c. Thales
- d. None of these

Q3. Euclid stated that 'A circle can be drawn with any centre and any radius, is a/an:

- a. definition
- b. postulate
- c. axiom
- d. proof

Q4. In which country Thales belong to?

- a. Greece
- b. Egypt
- c. Babylonia
- d. Rome

Case Study 2

In a class of Mathematics, the teacher taught a chapter 'Introduction to Euclid's Geometry' in which they taught about different postulates and axioms.



On the basis of the above information, solve the following questions:

Q1. How many axiom's are exist in Euclid's?

Q2. Write any one of the Euclid's postulate.

Q3. Write Euclid's axiom 5.

Q4. By which Euclid's axiom 'If $x + y = 5$, then $x + y - z = 5 - z$ '?