

Name:

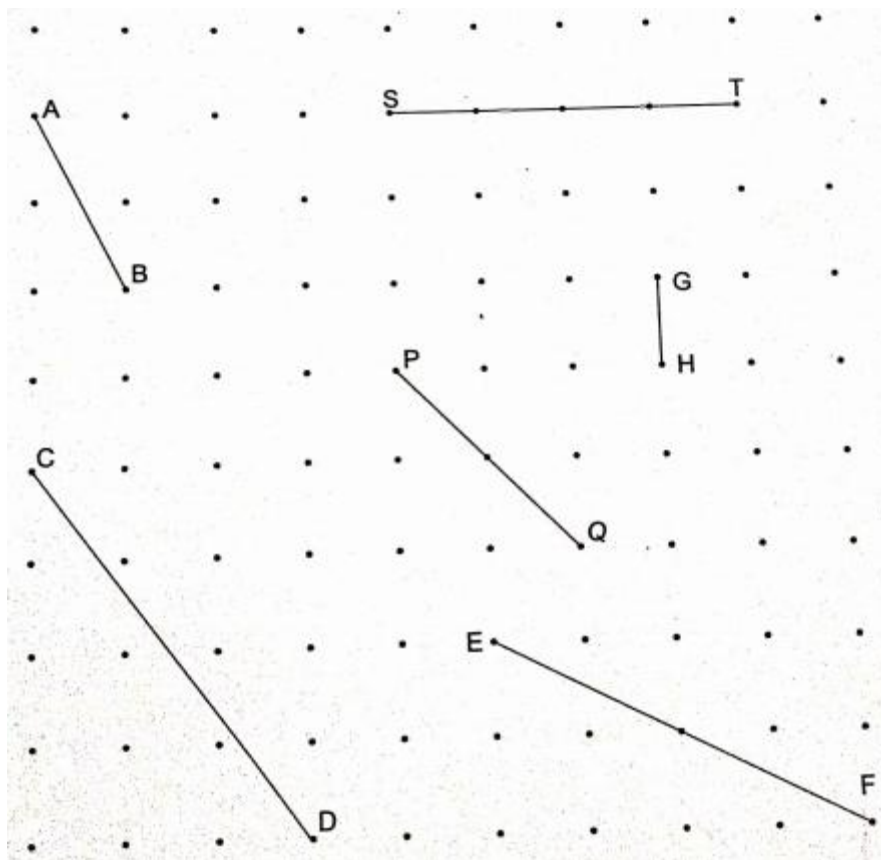
Class: VIII

Subject: MATHS

Session: 2020-21

**Topic: Rational Numbers and  
Irrational Numbers**

**Project: Some line segments of different length are drawn on a dotted square grid.**



**(a)** Find the length of each of the given line segments if the distance between any two adjacent dots on the grid is 1 cm.

- i. AB :  $\sqrt{2^2 + 1^2} = \sqrt{5}$  cm
- ii. CD : \_\_\_\_\_
- iii. EF : \_\_\_\_\_
- iv. GH : \_\_\_\_\_
- v. PQ : \_\_\_\_\_
- vi. ST : \_\_\_\_\_

**(b)** Which of the lengths are rational numbers?

\_\_\_\_\_

**(c)** Which of the lengths are irrational numbers?

\_\_\_\_\_

**(d)** Draw line segments of length  $XY = \sqrt{10}$  cm,  $KL = \sqrt{13}$  cm,  $FG = \sqrt{18}$  cm and  $MN = \sqrt{32}$  cm respectively on a dotted square grid and label them.

