

BCM SCHOOL, BASANT AVENUE DUGRI, LUDHIANA

CLASS IX

SUBJECT: MATHEMATICS

ASSIGNMENT

Ch4 Linear equations in two variables , Ch7 Triangles

MCQ

Q1 The value of b if $x=1$ and $y=1$ is a solution of

$$9bx + 11by = 20$$

- a) 20 b) -1 c) -20 d) 1

Q2 The mirror image of $(-4,-6)$ w.r.t to X Axis

- a) $(4,6)$ b) $(-4,6)$ c) $(6,4)$ d) $(2,4)$

Q3. In $\triangle ABC$, $AB = AC$ and angle $A = 100^\circ$ then find angle B

- a) 20° b) 40° c) 80° d) 60°

Assertion Reasoning

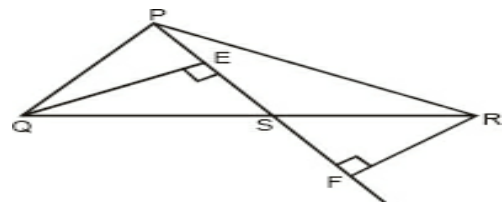
Q4 Assertion – In $\triangle ABC$, $\angle A = \angle C$ and $BC = 4$ cm and $AC = 3$ cm then the length of $AB = 3$ cm

Reason – Sides opposite to equal angles of a triangle are equal

- a) Both Assertion and reason are correct and reason is correct explanation for Assertion.
b) Both Assertion and reason are correct but reason is not correct explanation for Assertion.
c) Assertion is correct but reason is false.
d) Both Assertion and reason are false.

Subjective questions

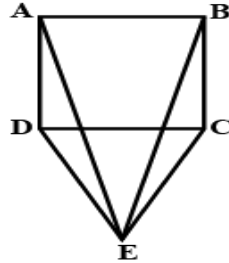
Q5 . In the given figure, PS is median produced upto F and QE and RF are perpendiculars drawn from Q and R, prove that $QE = RF$



Q6 Draw the graph of $3x + y = 5$ and write the coordinates of the points where the line intersects x axis and y axis

Q7 In the given figure, $\triangle CDE$ is an equilateral triangle on a side CD of a square ABCD.

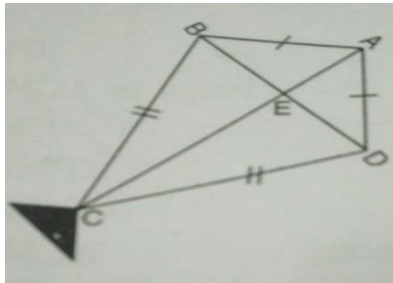
Show that $\triangle ADE \cong \triangle BCE$.



Case study

Q8 Niharika is a student of Class 9. She is making a kite to fly on holiday. Few questions came to

her mind while making the kite. Give answers to her questions.



- (i) Niharika tied the sticks AEC and BED at what angles to each other ?
- (ii) $\triangle CED$ is congruent to?
- (iii) Write the congruence criteria applicable for triangles ABC and ACD ?

