

# PSBB LEARNING LEADERSHIP ACADEMY BANGALORE

CLASS 8

MATHEMATICS

WA5-23/07/2021

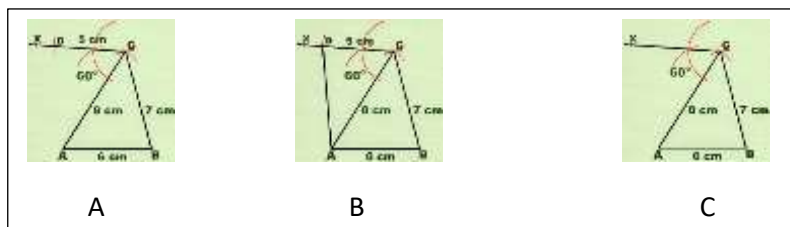
## Objective type

- 1) \_\_\_\_\_ sketch gives the idea of construction of any diagram.
- 2) We cannot construct an angle of  $105^\circ$  with compass. [True/False]
- 3) A rhombus can be constructed if one side and one angle is given. [True/False]
- 4) A quadrilateral can be constructed if all the four angles and a diagonal is given. [True/False]
- 5) Construct a quadrilateral  $ABCD$  in which  $AB = 6\text{ cm}$ ,  $BC = 7\text{ cm}$ ,  $CD = 5\text{ cm}$ ,  $AC = 8\text{ cm}$  and  $\angle ACD = 60^\circ$ .

Solution:



Which of the following should be the next step of construction?

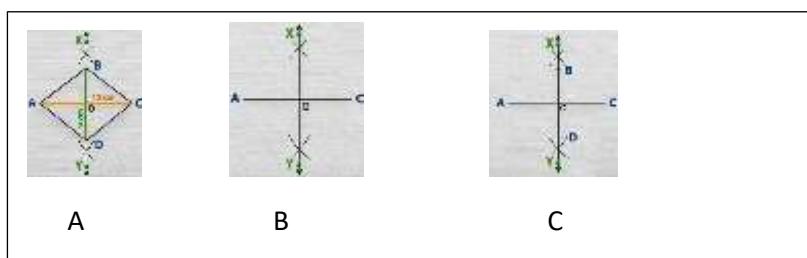


- 6] Construct a rhombus  $ABCD$  in which  $AC = 12\text{ cm}$  and  $BD = 9\text{ cm}$ .

Solution:



Which of the following should be the second step of construction?



- 7] Construct a square with a diagonal  $5\text{ cm}$ . Find the side of the square.
- 8] Construct a kite  $ABCD$ ,  $AB = 4\text{ cm}$ ,  $BC = 4.9\text{ cm}$ , and  $AC = 7.2\text{ cm}$ .
- 9] Construct a quadrilateral, where  $AB = 6.5\text{ cm}$ ,  $BC = 4.8\text{ cm}$ ,  $CD = 8.5\text{ cm}$ ,  $\angle B = 75^\circ$ , and  $\angle C = 98^\circ$ .
- 10] Construct a trapezium  $PQRS$ ,  $PQ \parallel SR$ ,  $PQ = 6\text{ cm}$ ,  $QR = PS = 3\text{ cm}$ ,  $SR = 5\text{ cm}$  and  $\angle SPQ = 70^\circ$ . Measure the remaining angles and write its unique property.
- 11] Draw a line, take a point  $M$ . Construct the following angles at  $M$   $135^\circ$ ,  $105^\circ$ ,  $90^\circ$  and  $60^\circ$ .
- 12] Construct a rectangle  $RECT$  with  $RE = 8\text{ cm}$ ,  $RC = 10\text{ cm}$ .