



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Algebra and Geometry

Class: 7

Date: 22.04.20

Duration: 40 min

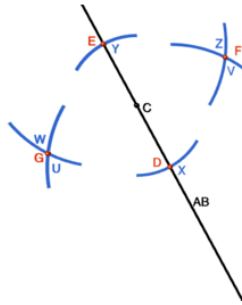
Worksheet-8

Full Marks: 15

## GEOMETRICAL CONSTRUCTION CONTINUED

Choose the Correct options:

1. What is this construction?



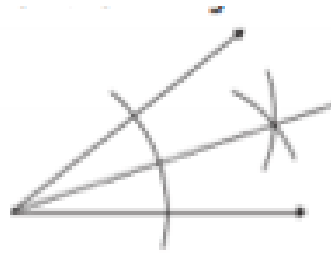
- a) Perpendicular Bisector
- b) Perpendicular Through Point Not On Line
- c) Parallel Line Through Given Point
- d) Perpendicular Line Through Point On Line.

2. What is this?



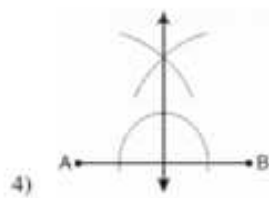
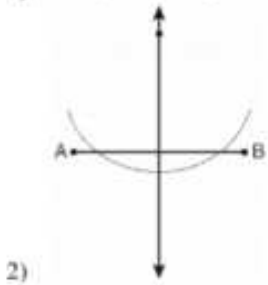
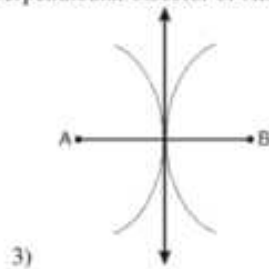
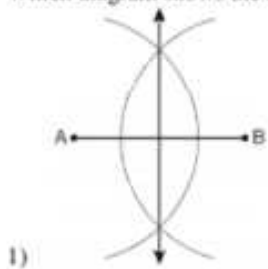
- a) Compass
- b) Circle creator
- c) Pencil swingy-thing
- d) Arc maker.

3. Which of the following constructions is illustrated?



- a) An angle is congruent to a given angle
- b) The bisector of a given angle
- c) The bisector of a given segment
- d) The perpendicular bisector of a given segment.

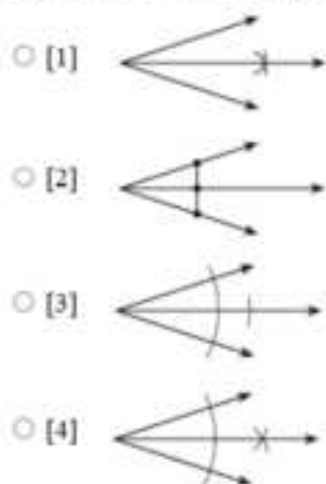
4. Which diagram shows the construction of the perpendicular bisector of  $\overline{AB}$ ?



- a) 1
- b) 2
- c) 3
- d) 4

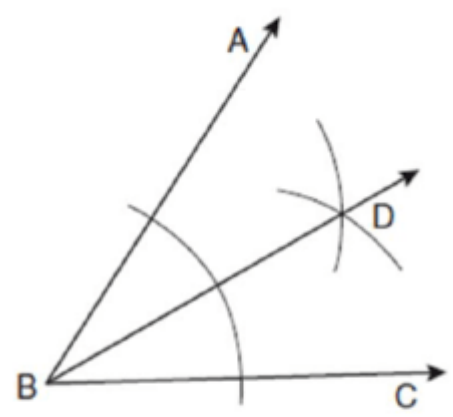
5.

Which diagram below shows a correct mathematical construction using only a compass and a straightedge to bisect an angle?



- a) 1
- b) 2
- c) 3
- d) 4

6. Based on the construction below, which statement must be true?

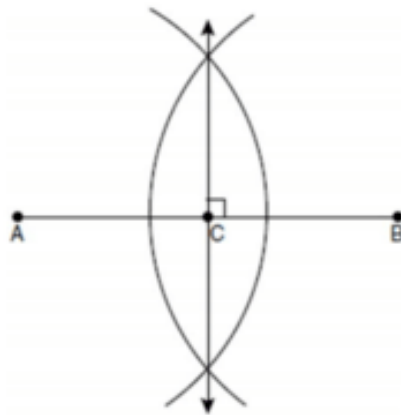


- 1)  $m\angle ABD = \frac{1}{2} m\angle CBD$
- 2)  $m\angle ABD = m\angle CBD$
- 3)  $m\angle ABD = m\angle ABC$
- 4)  $m\angle CBD = \frac{1}{2} m\angle ABD$

- a) 1
- b) 2
- c) 3
- d) 4

7.

The diagram below shows the construction of the perpendicular bisector of  $\overline{AB}$ .



Which statement is *not* true?

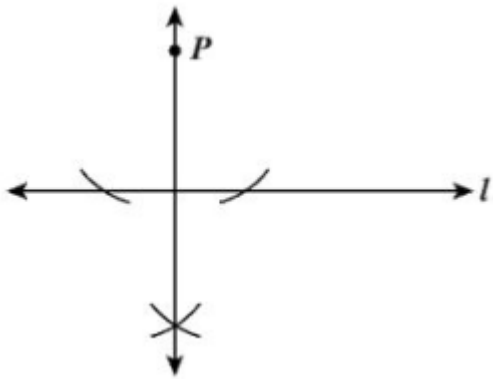
- 1)  $AC = CB$
- 2)  $CB = \frac{1}{2}AB$
- 3)  $AC = 2AB$
- 4)  $AC + CB = AB$

- a) 1
- b) 2
- c) 3
- d) 4

8. What does the word BISECT mean?

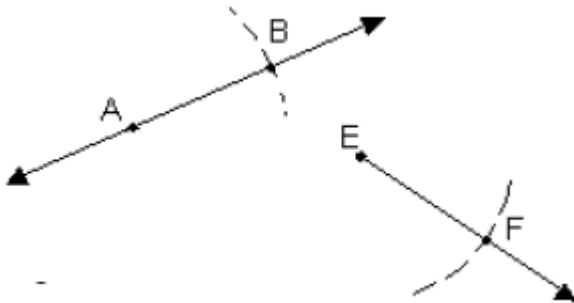
- a) To cut something into more than five pieces.
- b) It is a plane with two sets of wings.
- c) A shape that has three sides.
- d) To cut something into two congruent pieces or in half.

9. This construction forms a \_\_\_\_\_.



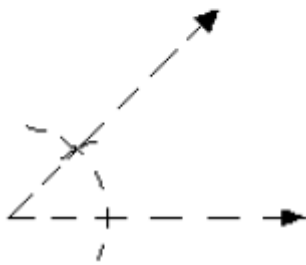
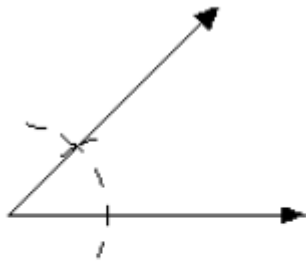
- a) Perpendicular Bisector
- b) Perpendicular Line through a point off the given line
- c) Perpendicular Line through a point on the given line
- d) Parallel Lines

10. The picture represents a compass and straightedge construction of \_\_\_\_\_?



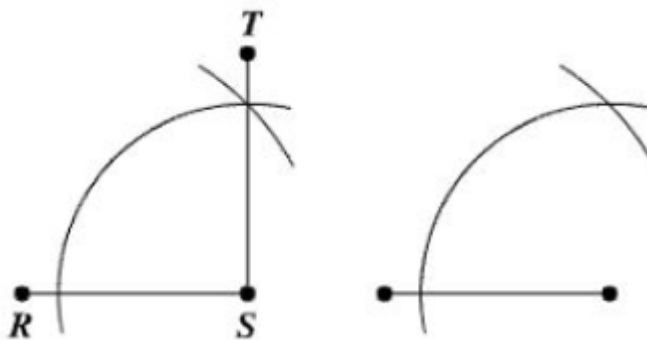
- a) Bisect a line segment
- b) Copy an angle
- c) Bisect an angle
- d) Copy a line segment

11. The picture represents a compass and straightedge construction of \_\_\_\_\_?



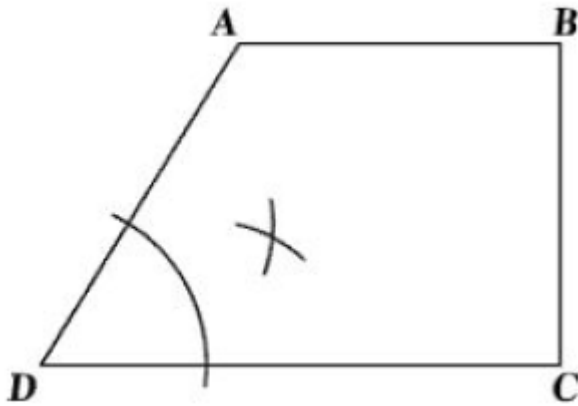
- a) Copy an angle
- b) Bisect an angle
- c) Copy a line segment
- d) Bisect a line segment

12. Which type of construction is illustrated in the figure?



- a) Copy a line segment
- b) Parallel lines
- c) Bisect an angle
- d) Copy an angle

13. What type of construction is illustrated in the diagram?



- a) Angle congruent to angle D
- b) Line segment congruent to AD
- c) Angle congruent to angle D
- d) Bisection of angle D

14. What must you be given to construct an equilateral triangle by compass?

- a) One side
- b) One angle
- c) Two side
- d) One angle and one side

15. If you are given only a compass and a ruler which angle is not possible to construct?

- a) 37.5
- b) 33.75
- c) 40
- d) 120