ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

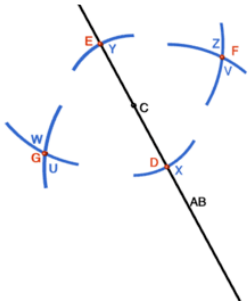
Sub: Algebra and Geometry **Class: 7** **Date: 22.04.20**

Duration: 40 min **Worksheet Solution-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 Though Given Point

d) Perpendicular Line Through Point On Line.

2. What is this?

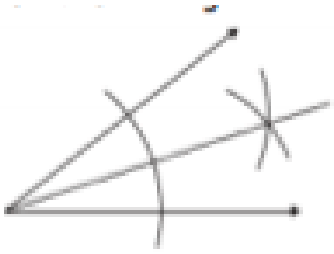
a) Compass

b) Circle creator

c) Pencil swingy-thing

d) Arc maker.

3. Which of the following constructions is illustrated?



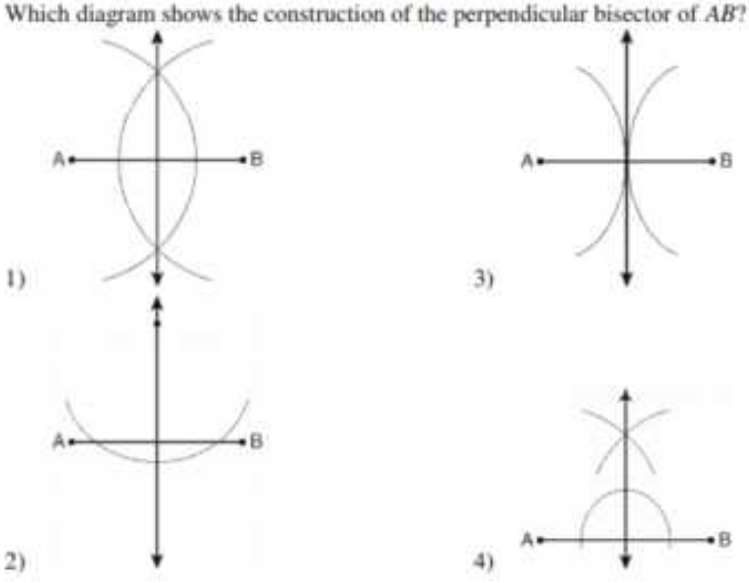
a) An angle is congruent to a given angle

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

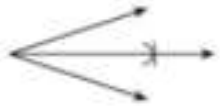
c) 3

d) 4

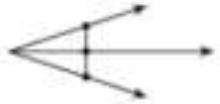
5.

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

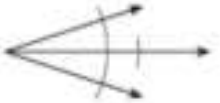
○ [1]



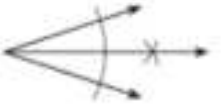
○ [2]



○ [3]



○ [4]



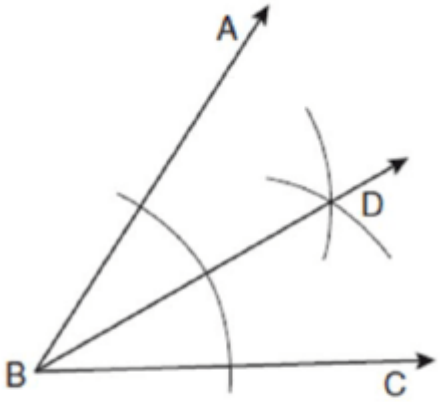
a) 1

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

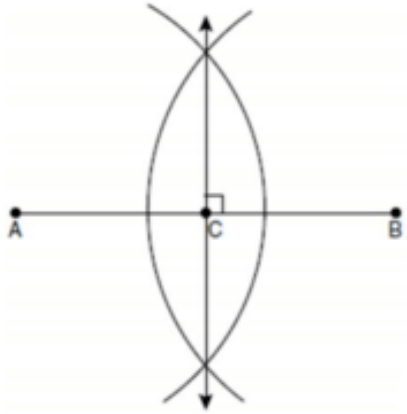
b) 2

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?

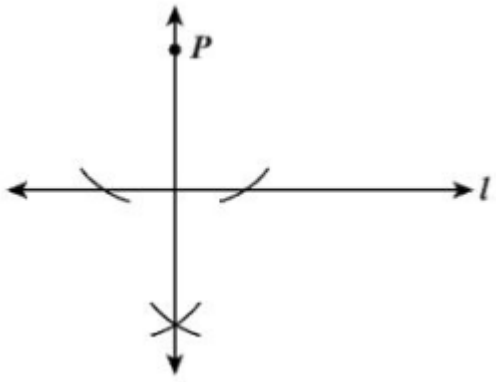
a) To cut something into more than five pieces.

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 _____.



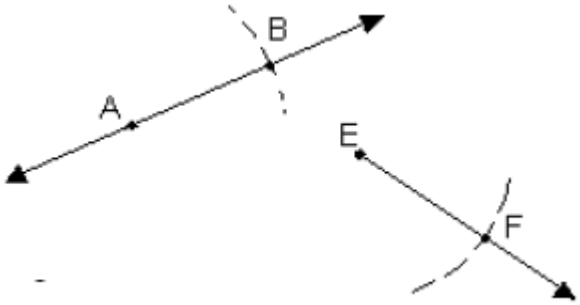
a) Perpendicular Bisector

b) Perpendicular Line through a point off the given line

c) Perpendicular Line through a point on the given line

d) Parallel Lines

10. 10. The picture represents a compass and straight edge construction of _____?



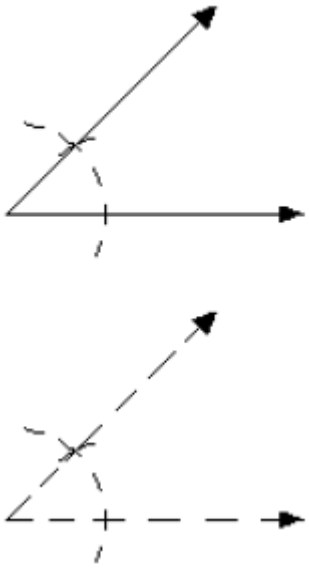
a) Bisect a line segment

b) Copy an angle

c) Bisect an angle

d) Copy a line segment

11. The picture represents a compass and straight edge construction of _____?



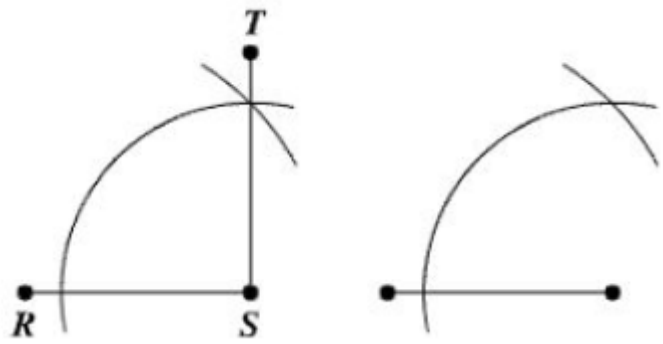
a) Copy an angle

b) Bisect an angle

c) Copy a line segment

d) Bisect a line segment

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



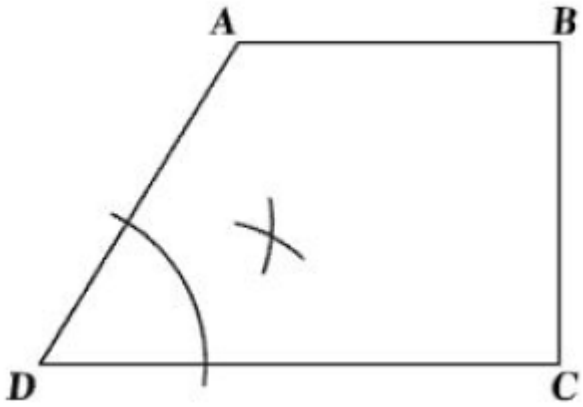
a) Copy a line segment

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