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India's Number 1 Education App

## MATHS

# BOOKS - RS AGGARWAL MATHS <br> <br> (HINGLISH) 

 <br> <br> (HINGLISH)}

## LINE SEGMENT, RAY AND LINE

Example

1. Measure the length of a given line segment
$\overline{A B}$.

## 2. Draw a line segment of length 6.8 cm .

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Exercise 11 A

1. Name all the line segments in each of the
following figures:

(i)

(1)

(iii)

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## 2. Identify and name of line segments and rays

in each of the following figures :

(i)

(i)

(ii)

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## 3. In the adjoining figure, name

(i)four line segments
(ii)four rays,
(iii) two non-intersecting line segments


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4. What do you mean by collinear points?

How many lines can you draw passing through
three collinear points ?
Given three collinear points $A, B$ and $C$. How many line segments do they determine ?

Name them.

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5. In the adjoining figure, name :
(i)four pairs of intersecting lines
(ii)four collinear points
(iii)three noncollinear points
(iv) three concurrent lines
(v) three lines whose point of intersection is $P$.


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6. Name three noncollinear points $A, B, C$ as
shown. Draw line through these points taking
two at a time. Name the lines. How many such
different lines be drawn ?


## 7. Count the number of line segments drawn

in each of the following figures and name
them.

(iii)

(i)

(iv)

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8. Consider the line $\overleftrightarrow{P Q}$ given below and find whether the given statements are true or false M is a point on ray $\overrightarrow{N Q}$

A. True
B. False
C. Cannot be determined
D. None of the above

Answer: B

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9. Consider the line $\overleftrightarrow{P Q}$ given below and find whether the given statements are true or false

L is a point on ray $\overrightarrow{M P}$

A. True
B. False

## C. Cannot be determined

## D. None of the above

## Answer: A

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10. Consider the line $\overleftrightarrow{P Q}$ given below and find whether the given statements are true or false Ray $\overrightarrow{M Q}$ is different from ray $\overrightarrow{N Q}$.

A. True
B. False
C. Cannot be determined
D. None of the above

Answer: A

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11. Consider the line $\overleftrightarrow{P Q}$ given below and find whether the given statements are true or false
$\mathrm{L}, \mathrm{M}$ and N are points on line segment $\overline{L N}$.

A. True
B. False
C. Cannot be determined

D. None of the above

Answer: A
12. Consider the line $\overleftrightarrow{P Q}$ given below and find whether the given statements are true or false Ray $\overrightarrow{L P}$ is different from ray $\overrightarrow{L Q}$.

A. True
B. False
C. Cannot be determined
D. None of the above

Answer: A

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13. Write ' $T$ ' for true and ' $F$ ' for false in case of
each of the following statements

Every point has a size.
A. True
B. False
C. Cannot be determined
D. None of the above

Answer: B

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14. Write ' $T$ ' for true and ' $F$ ' for false in case of
each of the following statements

A line segment has no length .
A. True
B. False
C. Cannot be determined
D. None of the above

Answer: B

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15. Write ' $T$ ' for true and ' $F$ ' for false in case of
each of the following statements

Every ray has a finite length.
A. True
B. False
C. Cannot be determined
D. None of the above

Answer: B

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16. Write 'T' for true and ' $F$ ' for false in case of
each of the following statements
The ray $\overrightarrow{A B}$ is the same as the ray $\overrightarrow{B A}$
A. True
B. False
C. Cannot be determined
D. None of the above

## Answer: False

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17. Write 'T' for true and 'F' for false in case of each of the following statements

The line segment $\overline{A B}$ is the same as the line segment $\overline{B A}$.
A. True
B. False
C. Cannot be determined

## D. None of the above

## Answer: A

## D Watch Video Solution

18. Write ' $T$ ' for true and ' $F$ ' for false in case of
each of the following statements
The line $\overleftrightarrow{A B}$ is the same as the line $\overleftrightarrow{B A}$
A. True
B. False

## C. Cannot be determined

D. None of the above

## Answer: A

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19. Write ' $T$ ' for true and ' $F$ ' for false in case of each of the following statements

Two points $A$ and $B$ in a plane determine $a$ unique line segment.
20. Write ' $T$ ' for true and ' $F$ ' for false in case of the following statement

Two intersecting lines intersect at a point.

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21. Write ' $T$ ' for true and ' $F$ ' for false in case of each of the following statements

Two intersecting planes intersect at a point.
22. Write ' $T$ ' for true and ' $F$ ' for false in case of each of the following statements

If points $A, B, C$ are collinear and points C,D,E are collinear then the points $A, B, C, D, E$ are collinear.

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23. Write 'T' for true and 'F' for false in case of each of the following statements

One and only one ray can be drawn with a given end point.

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24. Write ' $T$ ' for true and ' $F$ ' for false in case of each of the following statements

One and only one line can be drawn to pass through two given points.
25. Write ' $T$ ' for true and ' $F$ ' for false in case of each of the following statements

An unlimited number of lines can be drawn to pass through a given point.

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26. Fill in the blanks :

A line segment has a ___ length .
A. 1 cm
B. 2 cm

## C. Indefinite

D. definite

## Answer: D

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## 27. Fill in the blanks :

A ray has ____ end point.
A. 1
B. 2
C. 3
D. 4

Answer: A

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28. Fill in the blanks :

A line has ____ end point.
A. 1
B. 2
C. No
D. 3

## Answer: C

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29. Fill in the blanks :

A ray has no ___ length .

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30. Fill in the blanks :

A line ___-_ be drawn on a paper .

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## Exercise 11 B

1. Which of the following has no end points?
A. A line segment
B. A ray
C. A line
D. None of these

## Answer: C

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## 2. Which of the following has one end point?

A. A line
B. A ray
C. A line segment

## D. None of these

## Answer: B

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## 3. Which of the following has two end points?

A. A line segment
B. A ray
C. A line
D. None of these

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4. Which of the following has definite length ?
A. A line
B. A line segment
C. A ray
D. None of these
5. Which of the following can be drawn on a piece of paper ?

A. A line

B. A line segment
C. A ray
D. None of these

Answer: B
6. How many lines can be drawn passing through a given point ?
A. One only
B. Two
C. Three
D. Unlimited number

Answer: D

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7. How many lines can be drawn passing through two given points ?
A. One only
B. Two
C. Three
D. Unlimited number

Answer: A

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# 8. Two planes intersect 

A. at a point
B. in a plane
C. in a line
D. None of these

Answer: C

9. Two lines intersect

A. at a point

B. at two points
C. at an infinite number of points

D. in a line

Answer: A
10. Two points in a plane determine
A. exactly one line segment
B. exactly two line segment
C. an infinite number of line segments
D. None of these

Answer: A
11. The minimum number of points of intersection of three lines in a plane is
A. 1
B. 2
C. 3
D. 0

Answer: D

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12. The maximum number of points of intersection of three lines in a plane is
A. 0
B. 1
C. 2
D. 3

Answer: D

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## 13. Choose the correct statement :

A. every line has a definite length
B. every ray has a definite length
C. every line segment has a definite length

D. None of these

## Answer: C

14. Choose the false statement :
A. Line $\overleftrightarrow{A B}$ is the same as line $\overleftrightarrow{B A}$
B. Ray $\overrightarrow{A B}$ is the same as ray $\overrightarrow{B A}$
C. Line segment $\overline{A B}$ is the same as the line
segment $\overline{B A}$
D. None of these

Answer: B
15. How many rays can be drawn with a given point as the initial point?
A. One
B. Two
C. An unlimited number
D. A limited number only

## Answer: C

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