

Class 10 Maths Chapter 11 Constructions MCQs For Practice

1. If the scale factor is $\frac{8}{3}$, then the new triangle constructed is _____ the given triangle.
- (a) smaller the
 - (b) greater than
 - (c) overlaps
 - (d) congruent
2. To divide a line segment AB in the ratio 5 : 7, first a ray AX is drawn so that $\angle BAX$ is an acute angle and then at equal distances points are marked on the ray AX such that the minimum number of these points is
- (a) 8
 - (b) 10
 - (c) 11
 - (d) 12
3. To divide a line segment AB in the ratio 3 : 8, a ray AX is drawn first such that $\angle BAX$ is an acute angle and then points A_1, A_2, A_3, \dots are located at equal distances on the ray AX and the point B is joined to
- (A) A_{12}
 - (B) A_{11}
 - (C) A_{10}
 - (D) A_9
4. To divide a line segment AB in the ratio 6 : 4, draw a ray AX such that $\angle BAX$ is an acute angle, then draw a ray BY parallel to AX and the points A_1, A_2, A_3, \dots and B_1, B_2, B_3, \dots are located at equal distances on ray AX and BY, respectively. Then the points joined are
- (a) A_5 and B_4
 - (b) A_5 and B_3
 - (c) A_4 and B_4
 - (d) A_6 and B_4
5. To construct a triangle similar to a given $\triangle ABC$ with its sides $\frac{8}{5}$ of the corresponding sides of $\triangle ABC$ draw a ray BX such that $\angle CBX$ is an acute angle and X is on the opposite side of A with respect to BC. The minimum number of points to be located at equal distances on ray BX is
- (a) 5
 - (b) 13
 - (c) 8
 - (d) 3
6. To draw a pair of tangents to a circle which are inclined to each other at an angle of 45° , it is required to draw tangents at end points of those two radii of the circle, the angle between them should be
- (a) 135°
 - (b) 90°
 - (c) 60°
 - (d) 120°
7. By geometrical construction, which of the following ratio is not possible to divide a line segment?
- (a) 1 : 6

- (b) $\sqrt{4} : \sqrt{9}$
- (c) $10 : 1$
- (d) $2 + \sqrt{3} : 2 - \sqrt{3}$

8. Which theorem criterion can be used in providing the justification of the division of a line segment by usual method?

- (a) SSS criterion
- (b) BPT
- (c) Midpoint theorem
- (d) Pythagoras theorem

9. To draw a pair of tangents to a circle which are inclined to each other at angle x° , it is required to draw tangents at the end points of those two radii of the circle, the angle between which is

- (a) $90^\circ - x^\circ$
- (b) $90^\circ + x^\circ$
- (c) $180^\circ - x^\circ$
- (d) $180^\circ + x^\circ$

10. To construct a triangle similar to a given $\triangle ABC$ with its sides $5/9$ of the corresponding sides of $\triangle ABC$, first draw a ray BX such that $\angle CBX$ is an acute angle and X lies on the opposite side of A with respect to BC . Then locate points B_1, B_2, B_3, \dots on BX at equal distances and next step is to join

- (A) B_9 to C
- (B) B_4 to C
- (C) B_5 to C
- (D) B_{14} to C

***** ANSWER KEY *****

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|---------|---------|---------|---------|----------|
| 1 - (b) | 2 - (d) | 3 - (b) | 4 - (d) | 5 - (c) |
| 6 - (a) | 7 - (d) | 8 - (b) | 9 - (c) | 10 - (a) |