

Construction of Angle

1. Choose the correct answer:

a. $37\frac{1}{2}$ is the half of angle bisector of _____ angle.

i) 75°

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ii) 150°

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iii) 74°

☐

iv) 148°

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b. Which of the following angle cannot be constructed with the help of a pair of compasses and ruler?

i) 140°

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ii) 90°

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iii) 75°

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iv) 110°

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c. Twice of 45° measures:

i) 60°

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ii) 90°

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iii) 50°

☐

iv) 100°

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2. Draw an angle of 105° using ruler and compass.

3. Draw an angle $ABC = 75^\circ$ with your protractor then construct an angle PQR equal to ABC with your compass.

4. Draw an angle of measure 75° . Make a copy of it using only straight edge and compass.

5. Draw the following angles with protractor.

a. 48°

b. 55°

c. 125°

d. 165°

Construct an angle equal to them using compasses.

6. Draw $\angle ABC = 80^\circ$ with the help of a protractor. Draw its angle bisector.

7. Draw $\angle COD = 72^\circ$ with your protractor. Using ruler and compass, draw the angle bisector of $\angle COD$.

8. Construct the following angles using compasses.

a. 60°

b. 30°

c. 120°

d. 90°

e. 45°

f. 15°

9. Draw $\angle AOB$ of measure 95° and find its line of symmetry.

10. Using a protractor, draw an angle of 128° . With this angle as given, draw an angle of measure 96° .

11. Given $\angle APB = 400$, can you construct $\angle APQ$ such that $\angle APQ = 3 \angle APB$? If yes, construct it.

12. Draw an angle of 80° , using a protractor and divide it into four equal parts, using ruler and compasses. Check your construction by measurement.

13. Draw a circle and cut it into eight equal parts. Find the angle of each equal part. Also, draw the resultant angle with the help of compasses and ruler.