MATHS

BOOKS - UNITED BOOK HOUSE

Trigonometry : Concept of Measurement of Angle

Exercise

1. Multiple Choice Questions (MCQ) Circular measure of $11^{\circ}15'$ is

A. $\frac{\Pi^c}{16}$

B. $\frac{11\Pi^c}{16}$

C. $\frac{15\Pi^c}{16}$

D. $\frac{\Pi^c}{12}$.

Answer:

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2. Sexagesimal value of $\frac{5\Pi^c}{12}$ is

A. 65°

B. 75°

C. 85°

D. 95°

Answer:

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3. $3750''$ =

A. $3^\circ 7' 50$

B. $37^\circ 50'$

C. $1^\circ 2' 30($

D. $1^\circ 23'.$

Answer:

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4. Complementary angle of $27 \circ 27'27"$ is

A. $62^\circ 32' 33$

B. $62^\circ 33' 32$

C. $\hat{} \ 2^\circ 23' 33$

D. $62^\circ 33.$

Answer:

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5. 85.12° =

A. $85^\circ 1'2$

B. $85^\circ 12'$

C. $85^\circ 7'12$

D. none of these.

Answer:

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6. The minute hand of a clock rotates in 45 minutes an angle equal to

A. $\frac{\Pi^c}{2}$

B. $\frac{3\Pi^c}{2}$

C. $\frac{3\Pi^c}{4}$

D. $\frac{\Pi^c}{4}$.

Answer:

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7. If the are of length 330cm. Of a circle makes an angle. 42° at the centre, then the radius of the circle is

A. 450cm.

B. 540cm.

C. 242cm.

D. 422cm.

Answer:

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8. Two unequal arcs of a circle make two angles at the centre which are in the ratio 3 : 5 and the greater angle in degree is 75°, then the circular measure of smaller angle is

A. $\frac{\Pi^c}{2}$

B. $\frac{\Pi^c}{3}$

C. $\frac{\Pi^c}{4}$

D. $\frac{\Pi^c}{6}$.

Answer:

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9. In two circles two arc of same length makes an angle 30° and 60° respectively at the centre. The ratio of the radii of two circle is

A. 3 : 2

B. 1 : 2

C. 2 : 3

D. 2 : 1.

Answer:

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10. An arc of a circle of diameter 280cm. Makes an angle 27° at the centre. The length of the arc is

A. 68cm.

B. 66cm.

C. 64cm.

D. 60cm.

Answer:

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11. In circular measure, the value of the angle $11^\circ 15'$ is___

A. $\frac{\Pi^c}{16}$

B. $\frac{\Pi^c}{8}$

C. $\frac{\Pi^c}{4}$

D. $\frac{\Pi^c}{12}$

Answer:

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12. In a triangle ABC, $\angle ABC = 75^\circ$ and $\angle ACB = \frac{\Pi^c}{4}$. The circular measure of $\angle BAC$ is____

A. $5\frac{\Pi}{12}$

B. $\frac{\Pi}{3}$

C. $\frac{\Pi}{6}$

D. $\frac{\Pi}{2}$

Answer:

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13. The circular measure of an angle of an isosceles triangle is $5\frac{\Pi}{9}$. Circular measure of one of the other angles must be___

A. $5\frac{\Pi}{18}$

B. $5\frac{\Pi}{9}$

C. $2\frac{\Pi}{9}$

D. $4\frac{\Pi}{9}$

Answer:

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14. The degree measure of 1 radian is___

A. $57^{\circ}61'22$

B. $57^\circ 16' 22$

C. $57^\circ 32' 16$

D. $57^\circ 32' 16$

Answer:

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15. If the sum of two angles is 135° and their difference is $\frac{\Pi}{2}$, then determine the sexagecimal and circular value of two angles.

A. $2\frac{\Pi}{3}$

B. $3\frac{\Pi}{5}$

C. $5\frac{\Pi}{12}$

D. $\frac{\Pi}{3}$

Answer:

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16. Which is correct relation?

A. $1^\circ < 1^\circ$

B. $1^\circ > 1^\circ$

C. $1^\circ = 1^\circ$

D. $1^\circ = \frac{1}{90}$ right angle

Answer:

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17. In formula $s = r\theta$, θ is measured in____

A. sexagesimal system

B. circular system

C. in both system

D. none of these.

Answer:

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18. The measures of an angle are D and R in degree and radian respectively. Then R/D is equal____

A. $\frac{\Pi}{180}$

B. $\frac{180}{\Pi}$

C. 22/7

D. none of these.

Answer:

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19. The ratio of three angles of a triangle is 2 : 5 : 3. The circular measure of greatest angle is____

A. $\frac{\Pi}{5}$

B. $3\frac{\Pi}{10}$

C. $\frac{\Pi}{2}$

D. Π

Answer:

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20. If placed in stardard position, an angle of $7\frac{\Pi}{4}$ radians has the same terminal side as angle of____

A. -315°

B. -135°

C. -45°

D. -15°

Answer:

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21. A wedge shaped slice is cut from a circular pizza. The radius of the pizza is 8 inches and the rounded edge of crust of the slice

meausres 6.4 inches. What is the angle of the pointed end of the pizza slice, in radians to the nearest tenth?

A. 0.8

B. 1.6

C. 8

D. 51.2

Answer:

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22. if (3x-2y):(5x-7y)=5:3 then, find x:y.

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23. In a circle with a radius of a 3 centimetes, what is the length, in centimeters, of an arc intercepted by a central angle of 2 radians?

A. 3

B. 4

C. 6

D. 12

Answer:

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24. Express in radians, 235° is equivalent to___

A. $36\frac{\Pi}{47}$

B. $47\frac{\Pi}{36}$

C. $\frac{\Pi}{235}$

D. 235Π

Answer:

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