



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD



Class : 8

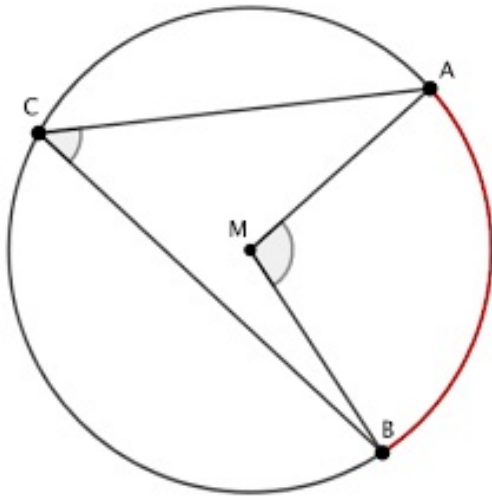
Subject : ALG/GEOM

Term : FIRST TERM

Max Marks : 60

Q 1 : If angle $ACB=52^\circ$, then angle $AMB=$

Marks : 1

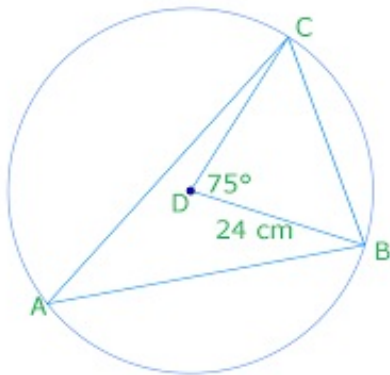


1. 102°
2. 104°
3. 100°
4. none of these

(This Answer is Correct)

Q 2 : Find angle CAB

Marks : 1

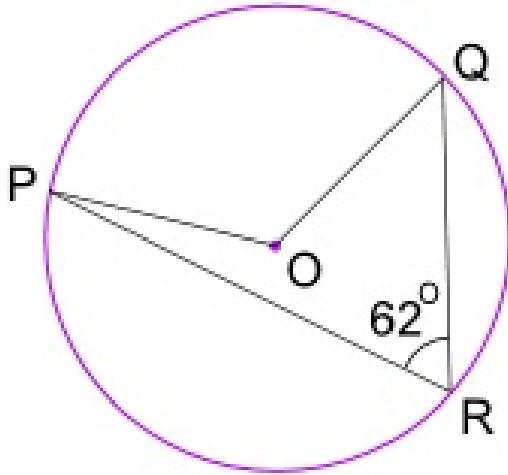


1. 37.5°
2. 37°
3. 38.5°
4. none of these

(This Answer is Correct)

Q 3 : Find angle POQ

Marks : 1

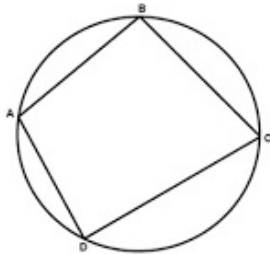


1. 128°
2. 126°
3. 124°
4. none of these

(This Answer is Correct)

Q 4 : In the given cyclic quadrilateral $\angle ABC=92^\circ$, find angle ADC

Marks : 1

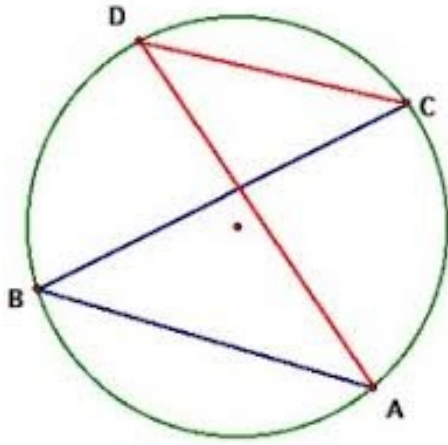


1. 90°
2. 82°
3. 92°
4. 88°

(This Answer is Correct)

Q 5 : If angle $\angle BCD=45^\circ$, then find angle BAD

Marks : 1

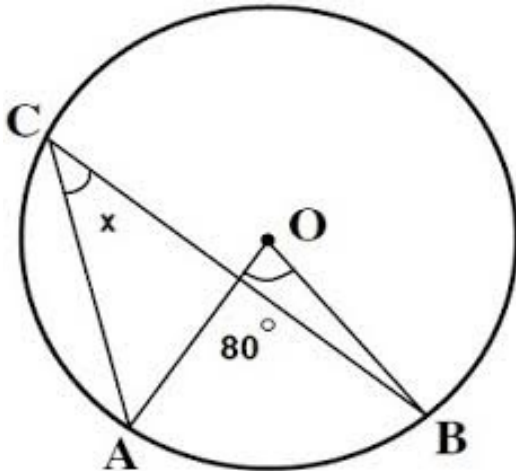


1. 40°
2. 45°
3. 90°
4. none of these

(This Answer is Correct)

Q 6 : Find x.

Marks : 1

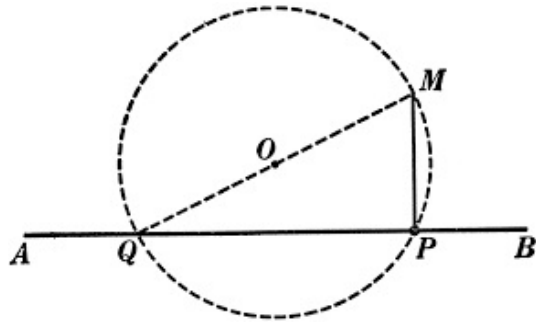


1. 30°
2. 40°
3. 50°
4. none of these

(This Answer is Correct)

Q 7 : In the circle with centre O find the angle MPQ

Marks : 1

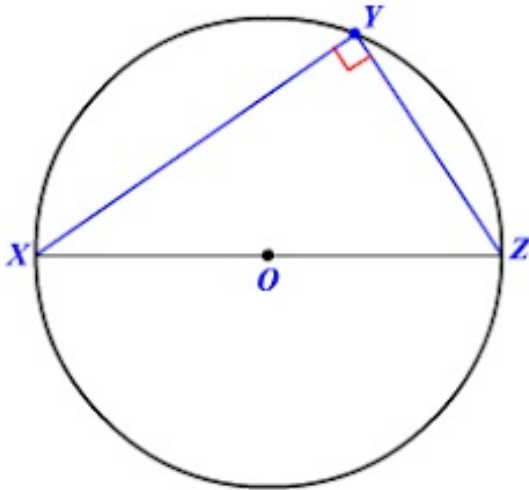


- 1. 75°
- 2. 95°
- 3. 90°
- 4. none of these

(This Answer is Correct)

Q 8 : In the circle with centre O, find the sum of angles YXZ and YZ X

Marks : 1

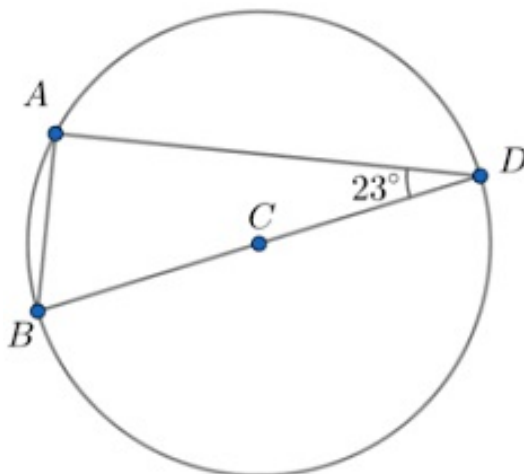


- 1. 90°
- 2. 80°
- 3. 60°
- 4. none of these

(This Answer is Correct)

Q 9 : BD is the diameter of the circle. Find angle ABD if angle ADB= 23°

Marks : 1

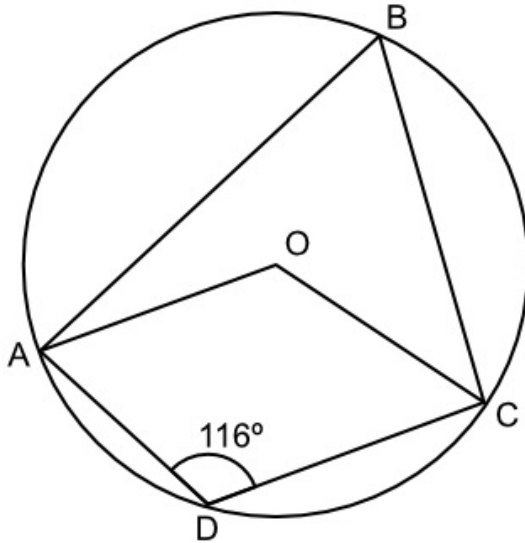


1. 57°
2. 67°
3. 60°
4. none of these

(This Answer is Correct)

Q 10 : Find angle ABC

Marks : 1

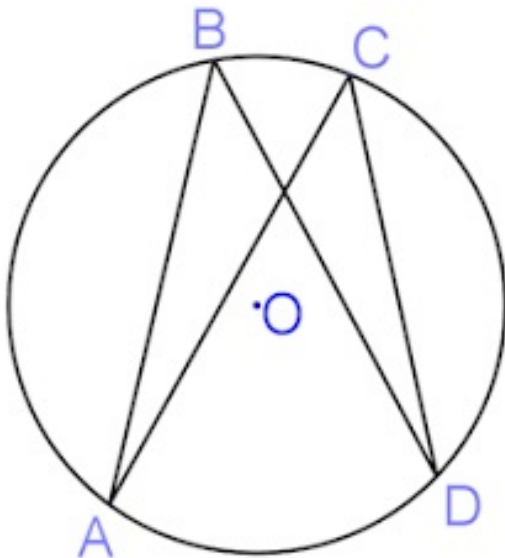


1. 64°
2. 46°
3. 54°
4. none of these

(This Answer is Correct)

Q 11 : If angle $\angle ABD = 65^\circ$, find angle $\angle ACD$

Marks : 1



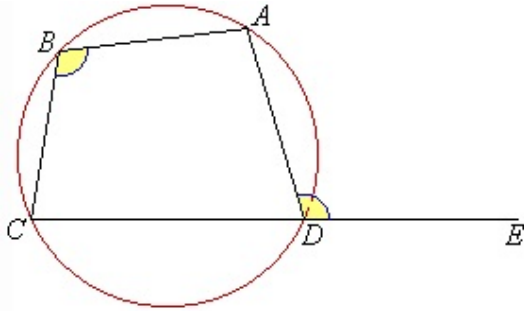
1. 60°
2. 130°
3. 65°

(This Answer is Correct)

4 . none of these

Q 12 : If angle ADE=110°, find angle ABC

Marks : 1

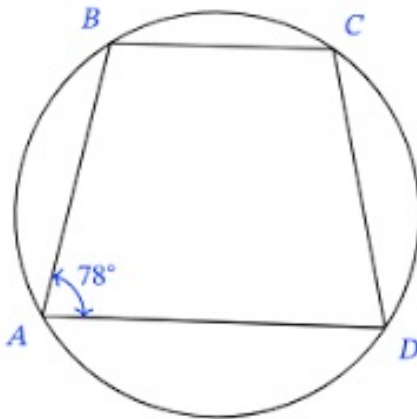


- 1 . 70°
- 2 . 110°
- 3 . 75°
- 4 . none of these

(This Answer is Correct)

Q 13 : Find angle BCD

Marks : 1

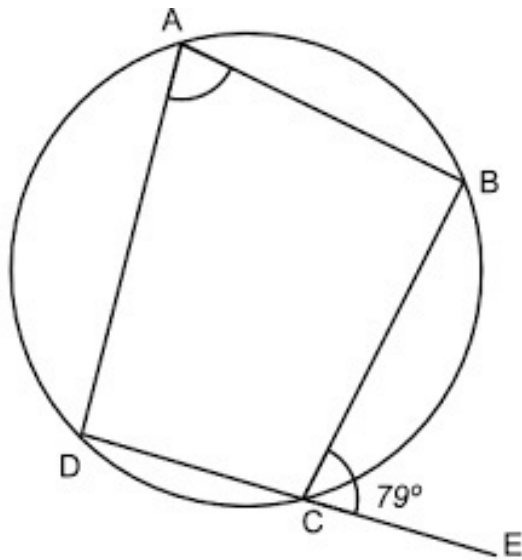


- 1 . 120°
- 2 . 72°
- 3 . 78°
- 4 . 102°

(This Answer is Correct)

Q 14 : Find Angle BCD

Marks : 1



1. 101°
2. 79°
3. 78°
4. 100°

(This Answer is Correct)

Q 15 : In a circle with centre O and radius 5 cm, AB is a chord of length 8 cm . If OM is perpendicular on AB, What is the length of OM? **Marks :** 1

1. 3cm
2. 6 cm
3. 2.5 cm
4. none of these

(This Answer is Correct)

Q 16 : Find factors : $-3m-15n$ **Marks :** 1

1. $3(m+5n)$
2. $[-3(m+5n)]$
3. $3(m-5n)$
4. none of these

(This Answer is Correct)

Q 17 : Find factor: a^3b+ab^3 **Marks :** 1

1. $ab(a+b)$
2. $a^2b(b+a)$
3. $ab(a^2+b^2)$
4. none of these

(This Answer is Correct)

Q 18 : Find factors: $x^2y^2+x^2$ **Marks :** 1

1. $x(y^2+1)$

2. $x^2(y^2+1)$

3. $x^2(y^2+x^2)$

4. none of these

 (This Answer is Correct)

Q 19 : Find factors : $ax+bx-ay-by$ **Marks :** 1

1. $(a+b)(x-y)$

2. $(a-b)(x-y)$

3. $(a-b)(x+y)$

4. none of these

 (This Answer is Correct)

Q 20 : Find factors : $(a+1)x + (a+1) y$ **Marks :** 1

1. $(a+1)(x+y)$

2. $(a+x) (a+y)$

3. $(a+1) (x+1)$

4. none of these

 (This Answer is Correct)

Q 21 : Find factors: $x(a+b) + y (a+b) + z(a+b)$ **Marks :** 1

1. $(a+b+1) (x+y+1)$

2. $(a+x+z) (b+ y+z)$

3. $(a+b) (x+y+z)$

4. none of these

 (This Answer is Correct)

Q 22 : Find factors : $a(m+n) +b (m+n)$ **Marks :** 1

1. $(a+b)(m-n)$

2. $(a-b)(m+n)$

3. $(a-b) (m-n)$

4. $(m+n) (a+b)$

 (This Answer is Correct)

Q 23 : Find the factors: $(x+y)^2+(x+y)$ **Marks :** 1

1. $(x+y) (x+y-1)$

2. $(x+1) (x+y+1)$

3. $(y+1) (x+y+1)$

4. $(x+y)(x+y+1)$

 (This Answer is Correct)

Q 24 : Find factors: $21x^2y - 35xy^2$ **Marks :** 1

(This Answer is Correct)

- 1 . $7xy(3x-5y)$
 - 2 . $yx(7x-5y)$
 - 3 . $7xy(3x+5y)$
 - 4 . none of these
-

Q 25 : Find factors : $1-x^2$ **Marks :** 1

- 1 . $(1+x)(1+x)$
- 2 . $(1-x)(1-x)$
- 3 . $(1-x)(1+x)$
- 4 . none of these

 (This Answer is Correct)**Q 26 :** Which of the following is common factor of $5xy$, $3pqr$ and $40xyz$ **Marks :** 1

- 1 . $5xy$
- 2 . xy
- 3 . $3xy$
- 4 . 1

 (This Answer is Correct)**Q 27 :** Find factors: $28x^3-70x^2$ **Marks :** 1

- 1 . $14x^2(2x+5)$
- 2 . $14x^2(2x-5)$
- 3 . $7x^2(4x+ 10)$
- 4 . none of these

 (This Answer is Correct)**Q 28 :** Find fctors : $(a-2c)a + (a-2c)b + (a-2c)c$ **Marks :** 1

- 1 . $(a-2c)(a+b+c)$
- 2 . $(a+2c)(a+b-c)$
- 3 . $(a+2c)(a+b+c)$
- 4 . $(a+2c)(a-b-c)$

 (This Answer is Correct)**Q 29 :** Find factors : $a(x+y+z) + b(x+y+z) + c(x+y+z)$ **Marks :** 1

- 1 . $(a-b-c)(x+y+z)$
 - 2 . $(a+b+c)(x+y+z)$
 - 3 . $(a+b+c)(x-y-z)$
 - 4 . none of these
-

 (This Answer is Correct)

Q 30 : Find factors : $(p+q)^2 + 3(p+q)$

Marks : 1

1. $3(p+q)(p+q+1)$
2. $(p+q)(3-p-q)$
3. $(p+q)(p+q+3)$
4. none of these

(This Answer is Correct)

Q 31 : Find factors : $x^4 + 6x^2 + 9$

Marks : 1

1. $(x^2+3)^2$
2. $(x^2-3)^2$
3. $(x-3)^2$
4. $(x+3)^2$

(This Answer is Correct)

Q 32 : Factorise: $x^2/25 - y^2/36$

Marks : 1

1. $(x/6+y/5)(x/6-y/5)$
2. $(x/5+y/6)(x/5-y/6)$
3. $(x/5+y/6)^2$
4. none of these

(This Answer is Correct)

Q 33 : Factorise: $4x^2-4x+1$

Marks : 1

1. $(2x+1)^2$
2. $(2x^2-1)^2$
3. $(2x-1)^2$
4. $(2x^2+1)^2$

(This Answer is Correct)

Q 34 : Factorise: $-64 + 25x^2$

Marks : 1

1. $(5x+8)^2$
2. $(5x+8)(5x-8)$
3. $(8+5x)(8-5x)$
4. none of these

(This Answer is Correct)

Q 35 : One of the factors of $3m^2-48$ is

Marks : 1

1. 3
2. $3m$
3. $3m^2$
4. none of these

(This Answer is Correct)

Q 36 : Factorise: $(x^3)^2 - 16$

Marks : 1

1. $(x^2+4)(x^2-4)$

2. $(x^3+4)(x^3-4)$

3. $(x^3-4)^2$

4. none of these

(This Answer is Correct)

Q 37 : Find value of 102×98 by using identities.

Marks : 1

1. 998

2. 996

3. 9986

4. 9996

(This Answer is Correct)

Q 38 : Factorise $25a^2 + 5ab$

Marks : 1

1. $5(5a+b)$

2. $5a(5a+b)$

3. $5b(5b+a)$

4. $5ab(a+b)$

(This Answer is Correct)

Q 39 : Find factors : $6a+18$

Marks : 1

1. $6(a+3)$

2. $6(a-3)$

3. $3(2a^2+3)$

4. none of these

(This Answer is Correct)

Q 40 : Factorise: $(x+5)x + (x+5)y$

Marks : 1

1. $(x-5)(x-y)$

2. $(x-5)(x+y)$

3. $(x+5)(x+y)$

4. none of these

(This Answer is Correct)

Q 41 : Factorise : $-50a^2 - 10b$

Marks : 1

1. $10(a+b)$

2. $[-10(5a^2+b)]$

3. $10(a^2+b)$

4. $10(5a^2+b)$

(This Answer is Correct)

Q 42 : Factorise : $6p+12pq$

Marks : 1

1. $6(p+q)$
2. $6pq(p+1)$
3. $6q(p+q)$
4. $6p(1+2q)$

(This Answer is Correct)

Q 43 : Measure of angle in a semi circle is always

Marks : 1

1. 45°
2. 60°
3. 90°
4. none of these

(This Answer is Correct)

Q 44 : measures of angles in the semicircle are always _____

Marks : 1

1. in the ratio 2:1
2. equal
3. complementary
4. supplementary

(This Answer is Correct)

Q 45 : The sum of opposite sides of a cyclic quadrilateral is always _____.

Marks : 1

1. 90°
2. 360°
3. 180°
4. none of these

(This Answer is Correct)

Q 46 : A chord divides the circumference into two parts. Smaller part is called _____.

Marks : 1

1. minor arc
2. major arc
3. minor segment
4. major segment

(This Answer is Correct)

Q 47 : A chord divides a circle into two parts. The larger part is called

Marks : 1

1. major arc
2. minor segment
3. major segment
4. none of these

(This Answer is Correct)

- Q 48 :** In a circle length of a chord MN is 12 cm, a perpendicular is drawn from the centre on MN at P. Find length of MP. **Marks : 1**
- 1 . 5cm
 - 2 . 6cm
 - 3 . 12 cm
 - 4 . 4cm
- (This Answer is Correct)
-

- Q 49 :** In a circle angle made by an arc at the centre of a circle is _____ the angle which this arc makes at the remaining part of the circumference. **Marks : 1**
- 1 . thrice
 - 2 . half
 - 3 . equal
 - 4 . twice
- (This Answer is Correct)
-

- Q 50 :** The perpendicular from the centre of a circle to a chord _____ **Marks : 1**
- 1 . bisects the chord
 - 2 . divides the chord into two unequal parts
 - 3 . trisect the chord
 - 4 . none of these
- (This Answer is Correct)
-

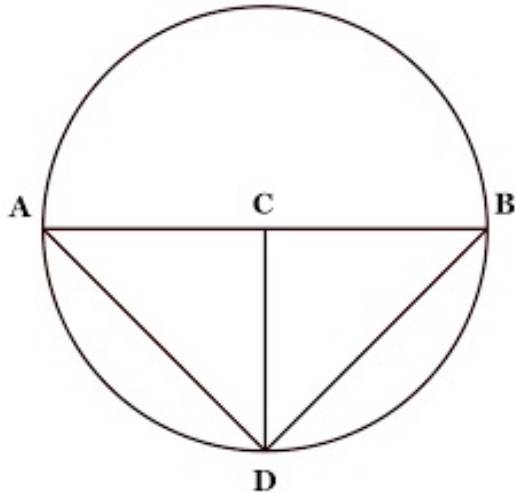
- Q 51 :** Find factors $7x-14y$ **Marks : 1**
- 1 . $7(x-2y)$
 - 2 . $7(x+2y)$
 - 3 . $7(x-y)$
 - 4 . none of these
- (This Answer is Correct)
-

- Q 52 :** Factoris : $9p^2- 64r^2$ **Marks : 1**
- 1 . $(3p+8r)(3p-8r)$
 - 2 . $(8p+3r)(8p-3r)$
 - 3 . $(3p-8r)^2$
 - 4 . none of these
- (This Answer is Correct)
-

- Q 53 :** Factorise : $65 a^2b^2-13ab$ **Marks : 1**
- 1 . $13(5a^2b^2-1)$
 - 2 . $13ab(5ab-1)$
 - 3 . $13ab(5ab+1)$
 - 4 . $13a(5b-a)$
- (This Answer is Correct)

Q 54 : In the give figure Triangle ABD is isosceles and AB is the diameter of the circle .Find angle DBA

Marks : 1



- 1 . 45°
- 2 . 90°
- 3 . 35°
- 4 . none of these

(This Answer is Correct)

Q 55 : PQ is diameter of a circle. R is lying on the circle. Join PR and QR. If angle PQR= 60° .Find angle RPQ.

Marks : 1

- 1 . 60°
- 2 . 120°
- 3 . 90°
- 4 . 30°

(This Answer is Correct)

Q 56 : If $(x+3)^2$ are factors of the polynomial

Marks : 1

- 1 . x^2-6x+9
- 2 . x^2+6x+9
- 3 . x^2-6x-9
- 4 . none of these

(This Answer is Correct)

Q 57 : If $(x+5)^2$ are the factors of $x^2+10x +P$. Find P

Marks : 1

- 1 . 30
- 2 . 100
- 3 . 50
- 4 . 25

(This Answer is Correct)

Q 58 : Find factors: $a^2-2 + 1/a^2$

Marks : 1

1. $(a+1/a)$

2. $(a-1/a)$

3. $(a-1/a)^2$

4. $(a+1/a)^2$

 (This Answer is Correct)

Q 59 : If $(a+5b)^2$ are factors of a polynomial $a^2+ 10ab + M$. Find M

Marks : 1

1. $100 b^2$

2. 25

3. $25a^2$

4. $25b^2$

 (This Answer is Correct)

Q 60 : If $(2x+5y)^2$ are the factors of polynomial $A + 20xy + 25y^2$. Find A

Marks : 1

1. $4x^2$

2. $16x^2$

3. $4x$

4. none of these

 (This Answer is Correct)