



ST. LAWRENCE HIGH SCHOOL

27, BALLYGUNGE CIRCULAR ROAD



Class : 7

Subject : ALG/GEOM

Term : FIRST TERM

Max Marks : 60

Q 1 : Length and breadth of a rectangle are $(x+8)$ and $(x-9)$ units respectively. Area of the rectangle is(in square units)

Marks : 1

1. $x^2 - x + 11$
2. $x^2 + x - 11$
3. $x^2 - x - 72$
4. $x^2 + x + 72$

(This Answer is Correct)

Q 2 : 101^2 is equal to

Marks : 1

1. 10201
2. 10200
3. 1000
4. 1001

(This Answer is Correct)

Q 3 : If $a = 31$ and $b = 19$, find the value of $a^2 + 2ab + b^2$

Marks : 1

1. 2500
2. 250
3. 100
4. 200

(This Answer is Correct)

Q 4 : $(x+2)(x+1)$ is equal to

Marks : 1

1. $x^2 + 3x + 2$
2. $x^2 + 9x + 7$
3. $x^2 + 9x + 9$
4. $x^2 + 9x - 5$

(This Answer is Correct)

Q 5 : Square of $(x - 1)$ is

Marks : 1

1. $x^2 + 3x + 2$
2. $x^2 - 2x + 1$
3. $x^2 + x - 11$
4. $x^2 + x + 72$

(This Answer is Correct)

Q 6 : $(x+y)(x-y)$ is equal to

Marks : 1

1. $x+y +xy$
2. $x+y - xy$
3. $x^2 - y^2$
4. $x^2 + y^2$

(This Answer is Correct)

Q 7 : $(x^2+y^2)(x^2 - y^2)$ is equal to

Marks : 1

1. $x^2 - y^3$
2. $x^4 - y^4$
3. $x^4 + y^4$
4. $x + y$

(This Answer is Correct)

Q 8 : The sum of $a+b+ab$, $-b+c-bc$, and $-c -a +ac$ is

Marks : 1

1. 1
2. 0
3. $ab-bc+ac$
4. $2a+2b-2c+ab$

(This Answer is Correct)

Q 9 : The sides of a right angled triangle are

Marks : 1

1. 3,4,5
2. 1,2,3
3. 0,1,2
4. 1,-1, 2

(This Answer is Correct)

Q 10 : Possible angles of a triangle are

Marks : 1

1. $45^\circ, 45^\circ, 90^\circ$
2. $90^\circ, 90^\circ, 0^\circ$
3. $70^\circ, 80^\circ, 90^\circ$
4. $180^\circ, 0^\circ, 1^\circ$

(This Answer is Correct)

Q 11 : One angle of an isosceles triangle is 90° . Each of the base angle is

Marks : 1

1. 60°
2. 45°
3. 90°
4. 360°

(This Answer is Correct)

Q 12 : If the lengths of two sides of a right triangle are 3 and 4 units, then length of hypotenuse is **Marks : 1**

- 1 . 2
- 2 . 3
- 3 . 4
- 4 . 5**

(This Answer is Correct)

Q 13 : Triangle whose all sides are equal **Marks : 1**

- 1 . equilateral**
- 2 . isosceles
- 3 . scalene
- 4 . none of these

(This Answer is Correct)

Q 14 : Triangles whose two sides are equal **Marks : 1**

- 1 . isosceles**
- 2 . scalene
- 3 . equilateral
- 4 . none of these

(This Answer is Correct)

Q 15 : Triangles with all unequal sides **Marks : 1**

- 1 . scalene**
- 2 . equilateral
- 3 . isosceles
- 4 . Right triangle

(This Answer is Correct)

Q 16 : In a polynomial, the exponents of the variables are always **Marks : 1**

- 1 . Integers
- 2 . Positive integers**
- 3 . Non-positive integers
- 4 . none of these

(This Answer is Correct)

Q 17 : Which of the following daily life situation best describes rotation? **Marks : 1**

- 1 . Opening a sliding glass door
- 2 . Flipping a page in a book
- 3 . Closing a drawer in the desk
- 4 . Turning the minute hand of a clock to adjust time**

(This Answer is Correct)

Q 18 : The letter which still looks the same after horizontal reflection is

Marks : 1

- 1 . M
- 2 . E
- 3 . K
- 4 . Z

(This Answer is Correct)

Q 19 : The sum of two interior opposite angles is equal to

Marks : 1

- 1 . exterior
- 2 . 90°
- 3 . 180°
- 4 . none of these

(This Answer is Correct)

Q 20 : The total measure of the three angles of a triangle is

Marks : 1

- 1 . 90°
- 2 . 360°
- 3 . 180°
- 4 . 270°

(This Answer is Correct)

Q 21 : Two angles of a triangle are 50° and 70° degree, then the third angle is

Marks : 1

- 1 . 60°
- 2 . 70°
- 3 . 80°
- 4 . 100°

(This Answer is Correct)

Q 22 : The sum of the lengths of any two sides of a triangle is _____ than the third side.

Marks : 1

- 1 . less
- 2 . greater
- 3 . equal
- 4 . none of these

(This Answer is Correct)

Q 23 : In a triangle if all angles are equal, then the measure of each angle is _____

Marks : 1

- 1 . 50°
- 2 . 90°
- 3 . 60°
- 4 . 100°

(This Answer is Correct)

Q 24 : Which is the longest side of a right angle?

Marks : 1

- 1 . base
- 2 . perpendicular
- 3 . hypotenuse**
- 4 . none of these

(This Answer is Correct)

Q 25 : Acute angles of a right triangle are

Marks : 1

- 1 . complementary**
- 2 . supplementary
- 3 . equal
- 4 . none of these

(This Answer is Correct)

Q 26 : Measure of each angle of equiangular triangle is

Marks : 1

- 1 . 45°
- 2 . 360°
- 3 . 90°
- 4 . 60°**

(This Answer is Correct)

Q 27 : Number of exterior angles of a triangle is

Marks : 1

- 1 . 3**
- 2 . 1
- 3 . 2
- 4 . 0

(This Answer is Correct)

Q 28 : Number of interior angles of a triangle is

Marks : 1

- 1 . 5
- 2 . 3**
- 3 . 1
- 4 . 2

(This Answer is Correct)

Q 29 : Ratio of angles of a triangle is 1:1:2, the biggest angle is

Marks : 1

- 1 . 90°**
- 2 . 45°
- 3 . 120°
- 4 . 105°

(This Answer is Correct)

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- Q 30 :** A closed figure formed by joining three non-collinear points is called a_____ **Marks : 1**
1. Square
 2. Triangle (This Answer is Correct)
 3. Rectangle
 4. Circle
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- Q 31 :** Subtract $2ab$ from $-2ab$. **Marks : 1**
1. $-4ab$ (This Answer is Correct)
 2. $2ab$
 3. 0
 4. ab
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- Q 32 :** $(7x^3 - 5x + 8) - (4x^3 - 2x + 1) =$ **Marks : 1**
1. $3x^3 - 3x + 7$ (This Answer is Correct)
 2. $3x^3 - 3x + 6$
 3. $3x^3 - 3x + 10$
 4. $3x^3 - 3x + 4$
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- Q 33 :** $(2x^3 + 3x^2 - 5) + (3x^2 + 7) =$ **Marks : 1**
1. $2x^3 + 6x^2 + 2$ (This Answer is Correct)
 2. $2x^3 + 6x^2$
 3. $2x^3 + 6x^2 - 1$
 4. $2x^3 + 6x$
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- Q 34 :** Which of the following is obtained by subtracting $x^2 - y^2$ from $y^2 - x^2$? **Marks : 1**
1. $2(x^2 - y^2)$ (This Answer is Correct)
 2. $2(x - y)$
 3. $x^2 - y^2$
 4. none of these
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- Q 35 :** An expression with only one term is called a_____ **Marks : 1**
1. monomial (This Answer is Correct)
 2. binomial
 3. trinomial
 4. none of these
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Q 36 : $x + y - xy$ is a _____ **Marks : 1**

1. monomial
2. binomial
- 3. trinomial** (This Answer is Correct)
4. none of these

Q 37 : The value of the expression $5x - 2$ when $x = 2$ is **Marks : 1**

1. 7
- 2. 8** (This Answer is Correct)
3. 9
4. 10

Q 38 : Which of the following are like terms? **Marks : 1**

1. $7x, 12y$
- 2. $15x, 21x$** (This Answer is Correct)
3. $3xy, 3x$
4. none of these

Q 39 : The coefficient of x in $8 - x + y$ is **Marks : 1**

- 1. -1** (This Answer is Correct)
2. 0
3. y
4. 8

Q 40 : In expressions $ax + by$ and $8x - 4y$; $a, b, 8$ and 4 are **Marks : 1**

- 1. coefficients** (This Answer is Correct)
2. variables
3. exponents
4. none of these

Q 41 : In expressions $ax + by$ and $8x - 4y$, x and y are **Marks : 1**

1. exponents
2. coefficients
- 3. variables** (This Answer is Correct)
4. none of these

Q 42 : An obtuse triangle has an angle more than

Marks : 1

- 1 . 90°
- 2 . 80°
- 3 . 180°
- 4 . 360°

(This Answer is Correct)

Q 43 : A triangle has angle measurements of 26° , 59° , and 95° . The triangle is

Marks : 1

- 1 . obtuse
- 2 . right
- 3 . acute
- 4 . equiangular

(This Answer is Correct)

Q 44 : A triangle which has angle measurements of 54° , 52° , and 74° is

Marks : 1

- 1 . obtuse
- 2 . acute
- 3 . right
- 4 . equiangular

(This Answer is Correct)

Q 45 : A triangle which has angle measurements of 74° , 90° , and 16° is

Marks : 1

- 1 . acute
- 2 . obtuse
- 3 . right
- 4 . none of these

(This Answer is Correct)

Q 46 : A triangle has side lengths of 19 centimetres, 19 centimetres, and 20 centimetres. What kind of triangle is it?

Marks : 1

- 1 . isosceles
- 2 . equilateral
- 3 . scalene
- 4 . Right triangle

(This Answer is Correct)

Q 47 : When classifying a triangle by its angles, what type of triangle has one right angle?

Marks : 1

- 1 . right triangle
- 2 . equilateral
- 3 . scalene

(This Answer is Correct)

4. Right triangle

Q 48 : When you reflect a shape, you _____ over an axis or line

Marks : 1

1. rotate
2. slide
- 3. flip**
4. none of these

(This Answer is Correct)

Q 49 : $(x+4)(x+4)=$

Marks : 1

- 1. $x^2+8x+16$**
2. x^2+8x
3. x^2+8x+4
4. x^2+8x-4

(This Answer is Correct)

Q 50 : $(a-b)(a-b)=$

Marks : 1

1. $a^2+2ab+b^2$
- 2. $a^2-2ab+b^2$**
3. a^2+2ab
4. $a^2+2ab+b$

(This Answer is Correct)

Q 51 : $(x+1)(x-1)(x^2+1)=$

Marks : 1

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

(This Answer is Correct)

Q 52 : $(x-5)(x+5) =$

Marks : 1

- 1. x^2-25**
2. x^2-5
3. x^2+25
4. x^2-25x

(This Answer is Correct)

Q 53 : Which letter looks same after vertical reflection?

Marks : 1

1. A
- 2. M**

(This Answer is Correct)

3 . E

4 . T

Q 54 : The word which looks same after horizontal reflection**Marks :** 1

1 . MOM

2 . CAT

3 . PUBG

4 . CRICKET

 (This Answer is Correct)

Q 55 : In triangle ABC, if $a^2+b^2=c^2$, then one angle is always**Marks :** 11 . 90° 2 . 100° 3 . 0° 4 . 25° (This Answer is Correct)

Q 56 : The degree of the polynomial $5+2y+y^2$ is**Marks :** 1

1 . 2

2 . 1

3 . 0

4 . 3

 (This Answer is Correct)

Q 57 : Which of these is not a polynomial?**Marks :** 11 . $5-7x$

2 . 7

3 . $3.4x$ 4 . \sqrt{x} (This Answer is Correct)

Q 58 : Degree of the polynomial $8a^3b^4+a^2b^2$ is**Marks :** 1

1 . 7

2 . 4

3 . 0

4 . 5

 (This Answer is Correct)

Q 59 : Ten's digit of a number is x and the unit's digit is y. The number is**Marks :** 11 . $10y+x$

(This Answer is Correct)2 . $10x+y$ 3 . xy 4 . $x+y$

Q 60 : 101×99 is equal to

Marks : 1

1 . 9999

 (This Answer is Correct)

2 . 99

3 . 999

4 . 9001
