

Geometry Exam

Thursday, April 30, 2020 8:15 PM

Question 1 Not yet answered Marked out of 1.00 Flag question	The sum of the measures of two supplementary angles is Select one: ☐ a. 45 ☐ b. 180 ☐ c. 0 ☐ d. 90
Question 2 Not yet answered Marked out of 1.00 Flag question	A quadrilateral with exactly two parallel sides is a/n Select one: ☐ a. rhombus ☐ b. parallelogram ☐ c. trapezoid ☐ d. square
Question 3 Not yet answered Marked out of 1.00 Flag question	The measure of each angle of an isosceles triangle is Select one: ☐ a. 90 ☐ b. 30 ☐ c. 5 ☐ d. none of these ☐ e. 15
Question 4 Not yet answered Marked out of 1.00 Flag question	The total number of diagonals in a hexagon is Select one: ☐ a. 3 ☐ b. 6 ☐ c. 9 ☐ d. 30
Question 5 Not yet answered Marked out of 1.00 Flag question	Two vertical angles have measures of $3x$ and $x+50$. The $x=$ Select one: ☐ a. 32.5 ☐ b. 25 ☐ c. 50 ☐ d. 10
Question 6 Not yet answered Marked out of 1.00 Flag question	The measures of the exterior angles of a pentagon are in a ratio of 1:2:3:4:5. The measure of the largest exterior angle is Select one: ☐ a. 72 ☐ b. 48 ☐ c. 24 ☐ d. 120
Question 7 Not yet answered Marked out of 1.00 Flag question	A certain polygon has a total of five diagonals that can be drawn from all vertices. How many sides would that polygon have? Select one: ☐ a. 7 ☐ b. 5 ☐ c. 2 ☐ d. 3
Question 8 Not yet answered Marked out of 1.00 Flag question	A scalene triangle has Select one: ☐ a. two equal sides ☐ b. no equal sides ☐ c. three equal sides

Question 9

Not yet answered

Marked out of 1.00

Flag question

If an angle is twice its supplement, the angle is ____ degrees.

Select one:

- ☐ a. 30
- ☐ b. 120
- ☐ c. 60
- ☐ d. 5

Question 10

Not yet answered

Marked out of 1.00

Flag question

If an acute angle increases, then its supplement

Select one:

- ☐ a. decreases
- ☐ b. increases
- ☐ c. not enough information
- ☐ d. stays the same

Question 11

Not yet answered

Marked out of 1.00

Flag question

The sum of the interior angles of a polygon with n sides is

Select one:

- ☐ a. 360
- ☐ b. 180
- ☐ c. $180(n-2)$

Question 12

Not yet answered

Marked out of 1.00

Flag question

The sum of the interior angles of a quadrilateral ____ the sum of its exterior angles.

Select one:

- ☐ a. <
- ☐ b. equals
- ☐ c. >

Question 13

Not yet answered

Marked out of 1.00

Flag question

A polygon with both equal angles and equal sides is called

Select one:

- ☐ a. regular
- ☐ b. equilateral
- ☐ c. equiangular
- ☐ d. Captain

Question 14

Not yet answered

Marked out of 1.00

Flag question

In a right angle, the side opposite the right angle is called the

Select one:

- ☐ a. altitude
- ☐ b. leg
- ☐ c. hypotenuse
- ☐ d. median

Question 15

Not yet answered

Marked out of 1.00

Flag question

In a polygon, the segment joining two non-consecutive vertices is called the

Select one:

- ☐ a. diagonal
- ☐ b. radius
- ☐ c. vertex
- ☐ d. diameter

Question 16

Not yet answered

Marked out of 1.00

Flag question

A triangle can have a maximum of how many non-acute angles?

Select one:

- ☐ a. 2
- ☐ b. zero
- ☐ c. 3
- ☐ d. 1

Question 17

Not yet answered

Marked out of 1.00

Flag question

Which of the following statements is false?

Select one:

- ☐ a. A parallelogram is a quadrilateral
- ☐ b. A rectangle is a parallelogram
- ☐ c. A rectangle is a square

Question 18

Not yet answered

Marked out of 1.00

Flag question

If in quadrilateral ABCD, $AB = DC$ and $BC = DA$, then diagonals AC and BD

Select one:

- ☐ a. are equal
- ☐ b. bisect each other
- ☐ c. are perpendicular to each other

Question 19
 Not yet answered
 Marked out of 1.00
 Flag question

The diagonals of a rectangle are always
 Select one:
☐ a. equal to each other
☐ b. perpendicular to each other
☐ c. bisectors of the angles though which they pass

Question 20
 Not yet answered
 Marked out of 1.00
 Flag question

Two consecutive angles of a parallelogram are always
 Select one:
☐ a. supplementary
☐ b. equal
☐ c. complementary

Question 21
 Not yet answered
 Marked out of 1.00
 Flag question

The diagonals of a rectangle are always
 Select one:
☐ a. equal and bisect each other
☐ b. none of these
☐ c. perpendicular and bisect each other
☐ d. equal and perpendicular to each other

Question 22
 Not yet answered
 Marked out of 1.00
 Flag question

Two opposite angles of a parallelogram are always
 Select one:
☐ a. supplementary
☐ b. equal
☐ c. complementary

Question 23
 Not yet answered
 Marked out of 1.00
 Flag question

If one angle of a trapezoid is a right angle, the greatest number of additional angles a trapezoid might have is
 Select one:
☐ a. 3
☐ b. 2
☐ c. 1

Question 24
 Not yet answered
 Marked out of 1.00
 Flag question

If one angle of a parallelogram is a right angle, the parallelogram is a
 Select one:
☐ a. rhombus
☐ b. square
☐ c. rectangle

Question 25
 Not yet answered
 Marked out of 1.00
 Flag question

An exterior angle at the base of an isosceles triangle is always
 Select one:
☐ a. an obtuse angle
☐ b. a right angle
☐ c. an acute angle

Question 26
 Not yet answered
 Marked out of 1.00
 Flag question

If the angles of a triangle are represented by x , y and $(x + y)$, the triangle is
 Select one:
☐ a. an equilateral triangle
☐ b. an isosceles triangle
☐ c. a right triangle
☐ d. none of these

Question 27
 Not yet answered
 Marked out of 1.00
 Flag question

The altitudes of a right triangle intersect
 Select one:
☐ a. inside the triangle
☐ b. at one of the vertices of the triangle
☐ c. outside the triangle

Question 28
 Not yet answered
 Marked out of 1.00
 Flag question

If two straight lines intersect, the vertical angles formed are always
 Select one:
☐ a. supplementary
☐ b. equal
☐ c. complementary

Question 29

Not yet answered

Marked out of 1.00

Flag question

It two angles are equal and supplementary, the angles are

Select one:

- ☐ a. acute angles
- ☐ b. right angles
- ☐ c. obtuse angles

Question 30

Not yet answered

Marked out of 1.00

Flag question

If AB has a midpoint, the AB is

Select one:

- ☐ a. a line
- ☐ b. a line segment
- ☐ c. a ray

Question 31

Not yet answered

Marked out of 1.00

Flag question

An isosceles triangle has

Select one:

- ☐ a. 2 equal sides
- ☐ b. no equal sides
- ☐ c. 3 equal sides

Question 32

Not yet answered

Marked out of 1.00

Flag question

A line has

Select one:

- ☐ a. 1 endpoint
- ☐ b. 2 endpoints
- ☐ c. no endpoints

Question 33

Not yet answered

Marked out of 1.00

Flag question

A median drawn to a side of a triangle is

Select one:

- ☐ a. a segment
- ☐ b. a ray
- ☐ c. a line

Question 34

Not yet answered

Marked out of 1.00

Flag question

Which of the following is not a method for proving triangles congruent?

Select one:

- ☐ a. SAS
- ☐ b. ASA
- ☐ c. SSA
- ☐ d. AAS
- ☐ e. SSS

Question 35

Not yet answered

Marked out of 1.00

Flag question

An exterior angle of a regular polygon cannot have the measure

Select one:

- ☐ a. 90
- ☐ b. 120
- ☐ c. 50
- ☐ d. 40
- ☐ e. 30

Question 36

Not yet answered

Marked out of 1.00

Flag question

Moving an image to the right is called a

Select one:

- ☐ a. reflection
- ☐ b. rotation
- ☐ c. translation

Question 37

Not yet answered

Marked out of 1.00

Flag question

Which of these is NOT to be used as a reason in a proof?

Select one:

- ☐ a. guess
- ☐ b. theorem
- ☐ c. postulate
- ☐ d. definition

Question 38 Not yet answered Marked out of 1.00 🚩 Flag question	Which of these is NOT a part of a formal proof? Select one: ☐ a. given ☐ b. none of these ☐ c. diagram ☐ d. statements ☐ e. reasons
Question 39 Not yet answered Marked out of 1.00 🚩 Flag question	Which triangle has congruent angles? Select one: ☐ a. right ☐ b. isosceles ☐ c. equilateral ☐ d. obtuse
Question 40 Not yet answered Marked out of 1.00 🚩 Flag question	An angle formed by extending a side of a triangle is called a/an Select one: ☐ a. exterior angle ☐ b. remote interior angle ☐ c. vertical angle ☐ d. complementary angle
Question 41 Not yet answered Marked out of 1.00 🚩 Flag question	Two angles of a triangle are 50 degrees and 60 degrees. The exterior angle formed near the third angle has a measure of Select one: ☐ a. 100 ☐ b. 110 ☐ c. 70 ☐ d. 180
Question 42 Not yet answered Marked out of 1.00 🚩 Flag question	In an isosceles triangle, the two equal sides are called the Select one: ☐ a. altitudes ☐ b. legs ☐ c. bases ☐ d. medians
Question 43 Not yet answered Marked out of 1.00 🚩 Flag question	The segment joining a vertex to the middle of the opposite side of a triangle is called the Select one: ☐ a. median ☐ b. altitude ☐ c. angle bisector ☐ d. perpendicular bisector
Question 44 Not yet answered Marked out of 1.00 🚩 Flag question	Which type of triangle has altitudes that form outside the triangle itself? Select one: ☐ a. right ☐ b. equiangular ☐ c. acute ☐ d. obtuse
Question 45 Not yet answered Marked out of 1.00 🚩 Flag question	Three planes intersect in Select one: ☐ a. a line segment ☐ b. a plane ☐ c. a point
Question 46 Not yet answered Marked out of 1.00 🚩 Flag question	The segment joining the two legs of a trapezoid is called Select one: ☐ a. a median ☐ b. an altitude ☐ c. a base
Question 47 Not yet answered Marked out of 1.00 🚩 Flag question	Which quadrilateral has equal diagonals Select one: ☐ a. rhombus ☐ b. rectangle ☐ c. trapezoid ☐ d. parallelogram
Question 48 Not yet answered Marked out of 1.00 🚩 Flag question	A square is _____ a parallelogram Select one: ☐ a. always ☐ b. never ☐ c. sometimes
Question 49 Not yet answered Marked out of 1.00 🚩 Flag question	The ratio of total interior angles to total exterior angles of a quadrilateral is Select one: ☐ a. 2:1 ☐ b. 1:1 ☐ c. 3:1 ☐ d. 1:2
Question 50 Not yet answered Marked out of 1.00	The sum of the interior angles of a certain polygon is the same as the sum of its exterior angles. How many sides does the polygon have? Select one:

Question 50 Not yet answered Marked out of 1.00 Flag question	The sum of the interior angles of a certain polygon is the same as the sum of its exterior angles. How many sides does the polygon have? Select one: ☐ a. 6 ☐ b. 4 ☐ c. 8 ☐ d. 10
Question 51 Not yet answered Marked out of 1.00 Flag question	Segment AC is a diagonal of regular polygon ABCDE. What does $\angle ACD$ equal? Select one: ☐ a. 72 ☐ b. 36 ☐ c. 5 ☐ d. 108
Question 52 Not yet answered Marked out of 1.00 Flag question	The sum of the angles of a triangle is Select one: ☐ a. 60 ☐ b. 180 ☐ c. 360 ☐ d. 90
Question 53 Not yet answered Marked out of 1.00 Flag question	The segment joining two points on a circle is called a/n Select one: ☐ a. chord ☐ b. secant ☐ c. radius ☐ d. tangent
Question 54 Not yet answered Marked out of 1.00 Flag question	Two circles with the same center are called Select one: ☐ a. circumscribed ☐ b. externally tangent ☐ c. concentric ☐ d. inscribed
Question 55 Not yet answered Marked out of 1.00 Flag question	An angle that is one half its arc is a/n _____ angle. Select one: ☐ a. interior ☐ b. central ☐ c. exterior ☐ d. inscribed
Question 56 Not yet answered Marked out of 1.00 Flag question	A diameter perpendicular to a chord _____ that chord Select one: ☐ a. is equal to ☐ b. bisects ☐ c. is parallel to
Question 57 Not yet answered Marked out of 1.00 Flag question	A circle P is circumscribed about a regular hexagon ABCDEF Arc AB = Select one: ☐ a. not enough information ☐ b. 90 ☐ c. 120 ☐ d. 60
Question 58 Not yet answered Marked out of 1.00 Flag question	A circle P is circumscribed about a regular hexagon ABCDEF $\angle A =$ Select one: ☐ a. 90 ☐ b. not enough information ☐ c. 120 ☐ d. 60

Question 59

Not yet answered
Marked out of 1.00

Flag question

A circle P is circumscribed about a regular hexagon ABCDEF

Arcs AB, BC, CD, DE, EF, FA are all equal

Select one:

- ☐ a. True
- ☐ b. False

Question 60

Not yet answered
Marked out of 1.00

Flag question

A circle P is circumscribed about a regular hexagon ABCDEF

If segment AD is drawn, ADEF is a

Select one:

- ☐ a. rectangle
- ☐ b. square
- ☐ c. rhombus
- ☐ d. trapezoid

Question 61

Not yet answered
Marked out of 1.00

Flag question

A circle P is circumscribed about a regular hexagon ABCDEF

If segment AE is drawn, triangle AEF is a/an _____ triangle.

Select one:

- ☐ a. scalene
- ☐ b. equilateral
- ☐ c. isosceles
- ☐ d. right

Question 62

Not yet answered
Marked out of 1.00

Flag question

A circle P is circumscribed about a regular hexagon ABCDEF

$\angle FAB$ is a/an _____ angle.

Select one:

- ☐ a. central
- ☐ b. interior
- ☐ c. inscribed
- ☐ d. exterior

Question 63

Not yet answered
Marked out of 1.00

Flag question

? r^2 is the formula to find the area of a _____

Select one:

- ☐ a. hexagon
- ☐ b. square
- ☐ c. circle
- ☐ d. triangle

Question 64

Not yet answered
Marked out of 1.00

Flag question

The side of an equilateral triangle is 12. Its area is

Select one:

- ☐ a. 48
- ☐ b. 36 $\sqrt{3}$
- ☐ c. 72
- ☐ d. 144

Question 65

Not yet answered
Marked out of 1.00

Flag question

The equilateral triangle with side 12 has altitude

Select one:

- ☐ a. 6 $\sqrt{3}$
- ☐ b. 24
- ☐ c. 6
- ☐ d. 6 $\sqrt{3}$

Question 66

Not yet answered
Marked out of 1.00

Flag question

A square is inscribed in a circle. A tangent is drawn to the vertex. What size angle is formed?

Select one:

- ☐ a. 180
- ☐ b. 45
- ☐ c. 90
- ☐ d. 22.5

Question 67

Not yet answered
Marked out of 1.00

Flag question

An inscribed angle and a central angle intercept the same arc. The inscribed angle is _____ the arc.

Select one:

- ☐ a. twice
- ☐ b. half
- ☐ c. equal to

Question 68
Not yet answered
Marked out of 1.00
Flag question

A tree casts a shadow 30 feet long when the angle of the sun is 32 degrees. How tall is the tree?

Select one:

- ☐ a. 56.6 feet
- ☐ b. 15.9 feet
- ☐ c. 18.7 feet
- ☐ d. 25.4 feet

Question 69
Not yet answered
Marked out of 1.00
Flag question

The hypotenuse of a right triangle with legs 6 and 8 is

Select one:

- ☐ a. 18
- ☐ b. 4
- ☐ c. 77
- ☐ d. 10

Question 70
Not yet answered
Marked out of 1.00
Flag question

A triangle can have sides 2,3 and 5.

Select one:

- ☐ True
- ☐ False

Question 71
Not yet answered
Marked out of 1.00
Flag question

A triangle with sides 3, 4 and 6 is _____

Select one:

- ☐ a. obtuse
- ☐ b. acute
- ☐ c. right

Question 72
Not yet answered
Marked out of 1.00
Flag question

The hypotenuse of a 45-45-90 right triangle is 1072. The legs are _____

Select one:

- ☐ a. 20
- ☐ b. 5
- ☐ c. 72
- ☐ d. 572
- ☐ e. none of these

Question 73
Not yet answered
Marked out of 1.00
Flag question

A 30-60-90 triangle has shortest leg 10. They hypotenuse is _____

Select one:

- ☐ a. 573
- ☐ b. 5
- ☐ c. 1073
- ☐ d. 20

Question 74
Not yet answered
Marked out of 1.00
Flag question

--| |-- is an example of

Select one:

- ☐ a. rotation
- ☐ b. translation
- ☐ c. reflection

Question 75
Not yet answered
Marked out of 1.00
Flag question

The letter which does not have line symmetry is

Select one:

- ☐ a. S
- ☐ b. A
- ☐ c. T
- ☐ d. C

Question 76
Not yet answered
Marked out of 1.00
Flag question

An arc has a measure of 40 degrees. It is a

Select one:

- ☐ a. semicircle
- ☐ b. minor arc
- ☐ c. major arc

Question 77
Not yet answered
Marked out of 1.00
Flag question

The circumference of a circle with diameter 12 is

Select one:

- ☐ a. 452.16
- ☐ b. 113.04
- ☐ c. 78.56
- ☐ d. 37.68

Question 78
Not yet answered
Marked out of 1.00
Flag question

The diameter of a circle fits around the circle _____ times.

Select one:

- ☐ a. 5
- ☐ b. 10
- ☐ c. 2
- ☐ d. pi

Question 79
Not yet answered
Marked out of 1.00
Flag question

The longest leg is

Select one:

- ☐ a. 573
- ☐ b. 1073
- ☐ c. 20
- ☐ d. 5

Question 80
Not yet answered
Marked out of 1.00
Flag question

Simplify 740

Select one:

- ☐ a. 4710
- ☐ b. 20
- ☐ c. 4
- ☐ d. 2710

Question 81
Not yet answered
Marked out of 1.00
Flag question

$(278)(72) =$

Select one:

- ☐ a. 32
- ☐ b. 6710
- ☐ c. 128
- ☐ d. 8716
- ☐ e. none of these

Question 82
Not yet answered
Marked out of 1.00
Flag question

Rationalize $2/\sqrt{2}$

Select one:

- ☐ a. 1
- ☐ b. $2\sqrt{2}$
- ☐ c. $\sqrt{2}$

Question 83
Not yet answered
Marked out of 1.00
Flag question

Find the area of a 60 degree sector with radius 10.

Select one:

- ☐ a. 209
- ☐ b. 188
- ☐ c. 314
- ☐ d. 52.3

Question 84
Not yet answered
Marked out of 1.00
Flag question

The angle of depression of a boat at sea from a 100 foot lighthouse is 20 degrees. Find the distance to the boat.

Select one:

- ☐ a. 36.4
- ☐ b. 292
- ☐ c. 274.8
- ☐ d. 106

Question 85
Not yet answered
Marked out of 1.00
Flag question

Which of these is not a Pythagorean Triple?

Select one:

- ☐ a. 3,4,5
- ☐ b. 1,2,3
- ☐ c. 7,24,25
- ☐ d. 5,12,13

Question **86**
Not yet answered
Marked out of 1.00
Flag question

The ratio of a right angle to the total degrees in a circle is

- Select one:
- ☐ a. 1:4
 - ☐ b. 1:5
 - ☐ c. 1:3
 - ☐ d. 1:2

Question **87**
Not yet answered
Marked out of 1.00
Flag question

$C^2 = A^2 + B^2$ is called the

- Select one:
- ☐ a. Theory of Relativity
 - ☐ b. slope formula
 - ☐ c. Pythagorean theorem
 - ☐ d. quadratic formula

Question **88**
Not yet answered
Marked out of 1.00
Flag question

The Pythagorean Theorem is for _____ triangles.

- Select one:
- ☐ a. acute
 - ☐ b. scalene
 - ☐ c. right
 - ☐ d. obtuse

Question **89**
Not yet answered
Marked out of 1.00
Flag question

Angle of elevation _____ Angle of depression

- Select one:
- ☐ a. is supplementary to
 - ☐ b. >
 - ☐ c. is complementary to
 - ☐ d. equals the