Question | Answer

#	Question	Answer
54.	What do you call the portion of a conditional statement immediately following *if* ?	Hypothesis
55.	What is the area formula for a circle?	Radius squared times pi (π), or $A = \pi r^2$
56.	What did the little boy say when his pet parrot flew away?	Polly-gone (polygon)
57.	Define a tangent line to a circle.	A line that lies in the plane of the circle and intersects the circle at only one point.
58.	Give the contrapositive of the statement : If you are holding this ball, then you are in math class.	If you are not in math class, then you are not holding this ball.
59.	What is the formula for the total surface area of a cylinder?	Lateral area plus the area of both bases, or $TA = 2h\pi r + 2\pi r^2$
60.	What is the sum of the exterior angles of any convex polygon (one angle at each vertex)?	360°
61.	Which angles are half the measures of their intercepted arcs?	Inscribed angles and angles formed with a secant ray and a tangent ray.
62.	Name a way to prove that a quadrilateral is a parallelogram.	Prove both pairs of opposite sides congruent; prove both pairs of opposite sides parallel; prove both pairs of opposite angles congruent; prove one pair of opposite sides congruent and parallel; prove that the diagonals bisect each other
63.	Which Knight of the Round Table loved math above all else ?	Sir Cumference
64.	A reflection in a line is an _____.	Isometry
65.	Two inscribed angles that intersect the same arc are _____.	Congruent
66.	What is the formula for the volume of a cone?	One third of the area of the base times the altitude of the cone or $V = \frac{1}{3} H \pi r^2$
67.	What do you call the point in the very middle of a circle ?	center
68.	Using several examples to make a conjecture is which kind of reasoning ? Deductive or inductive ?	Inductive
69.	How large is a major arc?	$180^o < \theta < 360^o$
70.	What is the sum of the interior angles of any convex polygon with *n*-number of sides?	$180^o (n - 2)$
71.	What is the formula for the lateral area of a right prism?	The perimeter of the base times the height of the prism, or $LA = ph$
72.	If the circumference of a circle is 8π, what is its radius and diameter ?	$r = 4$ $d = 8$
73.	What is the formula for the total surface area of a regular pyramid?	Lateral area plus the area of the base, or $TA = \frac{1}{2} pl + A_B$
74.	What is the formula for the volume of a regular pyramid?	One third the area of the base times the altitude of the pyramid, or $V = \frac{1}{3} A_B h$
75.	Define a secant line to a circle.	A line that intersects the circle at two points.
76.	Give the converse of the statement : If someone has taken geometry, then they are smart.	If someone is smart, then they have taken geometry.

Clever Catch®
Geometry II

Your **Geometry II Clever Catch®** provides an excellent way for children to practice Geometry. There are 76 color coded questions included (Orange = Proofs and Logics, Purple = Circles, Pink = Polygons, Green = Volume and Surface Area). Clever Catch® can be used at school in organized classroom activities. It can also be used on the playground or at home. Grades 9-12.

CLEVER CATCH® AT HOME OR ON THE PLAYGROUND

Basic play for Clever Catch® is simple. Two or more players toss the ball to each other, answering the problem underneath or closest to their left thumb. Each problem is numbered and enclosed in its own space, assuring the child will know which problem to answer. Answers are provided in this insert for independent play by students.

PLAYOFFS:
Pairs of students toss the ball back and forth for one minute answering problems. A scorekeeper tallies which team has the most correct answers in the time limit.

CLEVER CATCH® IN THE CLASSROOM

BEAT THE CLOCK:
The entire class plays cooperatively as one team, trying to better its own time and number of correct answers in each game.

DIRECTIONS:
1. Choose a timekeeper. You also will need a monitor - teacher or student - to keep track of correct answers.
2. Divide the class into two lines of equal length, students facing each other.
3. At the timekeeper's signal, toss Clever Catch® to the first student. As quickly as possible, this student reads and answers the problem underneath his/her left thumb.
4. This student then tosses Clever Catch® to the student directly across from him/her in the second line. This student reads and answers the problem under his/her left thumb.
5. Play continues until all students in both lines have had a turn. When the last student has answered, the time and correct number of answers are recorded.

#	Question	Answer
1.	What marthupial lives in North America?	apothem
2.	Define a minor arc in a circle.	An arc with a measurement less than 180°
3.	How many sides does a octagon have?	8
4.	What is the lateral area formula for a cone?	Half the circumference times the slant height, or $LA = \pi r l$
5.	What is the sum of the interior angles of a hexagon?	720°
6.	Name the 4 ways to prove any 2 triangles congruent.	SSS Postulate; SAS Postulate; AAS Theorem; ASA Postulate
7.	What is a chord?	line segment with endpoints on a circle
8.	How many sides does a pentagon have?	5
9.	Find the circumference of the circle.	$C = 6\pi$ cm
10.	What is the formula for the lateral area of a regular pyramid?	Half the perimeter times the slant height, or $LA = \frac{1}{2}pl$
11.	What is a diameter?	A chord that contains the center point of a circle.
12.	Give the negation of the following statement: A giraffe is not a monkey.	A giraffe is a monkey.
13.	If the diameter of a circle is 10, what is its radius and circumference?	$r = 5$ $C = 10p$
14.	If the scale factor of two similar solids is $a:b$, what is the ratio of corresponding areas?	$a^2 : b^2$
15.	Define similar polygons.	All corresponding angles are congruent and all corresponding sides are of equal ratio (proportional).
16.	What does it mean if a square is inscribed inside a circle?	Each of the square's vertices lies on the circle.
17.	What is the formula for the lateral area of a cylinder?	Circumference times the altitude, or $LA = 2r\pi h$
18.	Is a translation an isometry?	yes
19.	In the same circle or congruent circles, two chords equidistant from the center of the circle(s) are _____.	Congruent
20.	What is the volume formula for a cylinder?	Area of the base times the altitude of the cylinder, or $V = h\pi r^2$
21.	Is a rotation an isometry?	yes
22.	What kind of angle is inscribed in a semicircle?	Right Angle
23.	Name special ways to prove right triangles congruent.	HL, LL, LA, HA (H- hypotenuse, L- leg, A- acute angle)
24.	What is the sum of the interior angles of a octagon?	1080°
25.	What is the formula for the total surface area of a right prism?	Lateral area plus the area of both bases or $TA = ph + 2A_B$
26.	When two chords intersect inside a circle, the product of the segments of one chord is equal to _____.	The product of the segments of the other chord.
27.	How many sides does a hexagon have?	6
28.	What do you call a false example that shows a conjecture is not true?	Counter Example
29.	What is an arc of 180° called?	Semicircle
30.	What is the formula for the surface area of a sphere?	Four times the area of its great circle or $TA = 4\pi r^2$
31.	The measure of an angle formed by two secants, two tangents, or a secant and a tangent intersecting outside a circle is equal to ___.	Half the difference of its intercepted arcs.
32.	What is an isometry?	An isometry maps a polygon to a congruent polygon.
33.	What is the statement formed by interchanging the hypothesis and the conclusion.	Converse
34.	How many degrees in a full circle?	360°
35.	If a line is tangent to a circle, what is the relationship of the radius drawn to the point of tangency?	The radius is perpendicular to the tangent at the point of tangency
36.	What is the formula for the area of any regular polygon?	Half the apothem times the perimeter or $A = \frac{1}{2}ap$
37.	Name a way to prove two triangles similar.	AA Postulate; SAS Similarity Theorem; SSS Similarity Theorem.
38.	What is the formula for the circumference of a circle?	Twice the radius times pi (π), or $C = 2\pi r$
39.	What is the sum of the interior angles of a pentagon?	540°
40.	What is the formula for the volume of a right prism?	Area of the base times the height of the prism, or $V = A_B h$
41.	Find x.	6 yards
42.	How is the irrational number pi (π) determined?	ratio of circumference to diameter
43.	If the scale factor of two similar solids is $a:b$, what is the ratio of their volumes?	$a^3 : b^3$
44.	What kind of statement is formed by negating both the hypothesis and conclusion.	Inverse
45.	If two chords intersect in a circle, what does one of the angles formed equal?	Half the sum of its intercepted arcs.
46.	What do you say when a curse has been removed from you?	Hex-a-gone
47.	If the radius of a circle is 2, what is its diameter and circumference?	$d = 4$ $C = 4\pi$
48.	How do you prove that two lines are parallel?	Prove corresponding angles congruent; prove alternate interior angles congruent; prove alternate exterior angles congruent; prove same side intereior angles supplementary.
49.	What is the great circle of a sphere?	A circle which divides a sphere into two hemispheres
50.	What does the measure of a central angle equal?	It is equal to the measure of its intercepted arc.
51.	What is the volume formula for a sphere?	$V = \frac{4}{3}\pi r^3$
52.	Give the inverse of the statement: If you are a monkey, then you like bananas.	If you are not a monkey, then you do not like bananas.
53.	What is the formula for the total area of a cone?	Lateral area plus the area of the base or $TA = r + r^2$