Geometry Chapter 2 Practice Test 2

Name _____

1.   If you are 10, you should not drive a car.

Converse: _____

Inverse: _____

Contrapositive: _____

2.   If you are a teacher, you are not paid well.

Converse: _____

Inverse: _____

Contrapositive: _____

3.   All students love math.

Converse: _____

Inverse: _____

Contrapositive: _____

4. Consider the statement "If a figure is a square, it has four right angles."

        a.) Is the converse of this statement true? _____

        b.) Is the inverse of this statement true? _____

        c.) Is the contrapositive of this statement true? _____

True/False

_____ 5.   The converse of all dogs like to chase cats is that some
                   dogs like to chase cats.

_____ 6.   The contrapositive of "if you have a dog, you like cats" is
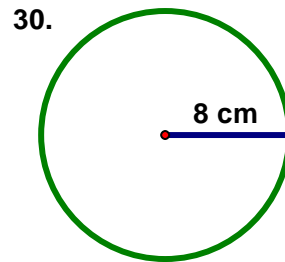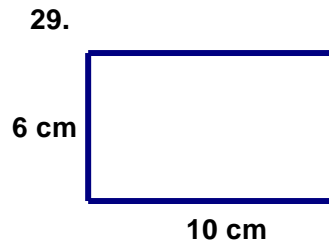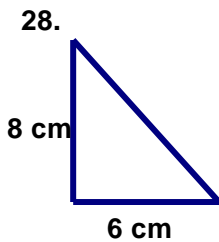   "if you don't like cats, you love dogs."

_____ 7.   The inverse of "if you are old, you have a big head" is
                   " if you don't have a big head, then you are not old."

Tell what property is demonstrated below.

_____ 8. $AB+VG=AB+VG$

_____ 9.   If AC = YN and AC + 4 = 10, then YN + 4 = 10.

_____ 10.   If AB = XY, then XY = AB

_____ 11.   If XY − 4 = BC, then XY = BC + 4.

_____ 12.   If AB = 2 and 2 = CY, then AB = CY.

_____ 13.   If AB − XY= BC − XY, then AB = BC

_____ 14.   If $\angle XYZ + \angle ABC = \angle ABC + \angle CWH$, then $\angle XYZ = \angle CWH$.

_____ 15.   If $\angle 1 + \angle 2 = 90$ and $\angle 2 = \angle 5 + \angle 6$, then $\angle 1 + \angle 5 + \angle 6 = 90$.

_____ 16.   If AB = 6 and AB + BC = XY, then 6 + BC = XY.

_____ 17.   There are 30 kids who play either soccer or baseball.
4 of the 30 kids play both soccer and baseball. If the soccer
team has 18 members, how many kids are on the baseball team?

_____ 18.   There are 12 kids in band and 16 in chorus. If 4 of these kids are
in both chorus and band, how many total kids are in either
band or chorus?

_____ 19.   "If you drive in the left lane, you are not a good driver" is represented
by p→q. What would be the symbolic representation of "if you are a
good driver, you don't drive in the left lane"?

_____ 20.   "If you like Jim, you are not a friend of Rick" is represented
by p→q. What would be the symbolic representation of "if you
are a friend of Rick, you like Jim"?

_____ 21.   What is the contrapostive of ~r → p?

_____ 22.   What is the inverse of ~r → p ?

_____ 23.   In my class, everyone plays either golf or tennis. 14 play golf and 8 play tennis.
If 3 play both tennis and golf, how many kids are in my class?

_____ 24.   I have a total of 14 kids. If 10 of my kids play soccer and 12 play
tennis, how many play both tennis and soccer?

_____ 25. There are 30 kids who play either soccer or baseball.
4 of the 30 kids play both soccer and baseball. If the soccer
team has 18 members, how many kids are on the baseball team?

_____ 26. If the area of a circle is 380.13 cm^2, what is the circumference?

_____ 27. What is the perimeter of a triangle with the following vertices:
(2, 6) (7, 4) (9, 12)

Give the perimeter (circumference for a circle) and area of each of the given shapes. (1 point each)

28.

8 cm

6 cm

29.

6 cm

10 cm

30.

8 cm

28. Circumference = _____

Area = _____

29. Perimeter = _____

Area = _____

30. Circumference = _____

Area = _____

_____ 31. A rectangle has a width of 3n + 5 and a length of 2n + 10.
If the perimeter is 70, what is the value of n?

True/False for 32-35 and please write out the entire word neatly.

_____ 32. The converse of "all people like pizza" is "some people like pizza."

_____ 33. The inverse of "if you like dogs, then you are a kid" is
"if you are a kid, then you like dogs."

_____ 34. The contrapositive of "if you have a dog, you like cats" is
"if you don't like cats, you love dogs."

_____ 35. Consider the statement: "If an angle is 90 degrees, it is a right angle."
Is the converse of this statement true or false?