Geometry Chapter 2 Practice Test 1

Name _____

Consider the following:
a – you live in Radford
b – you live in America
c – you live in Virginia
d – you like Sal's

1. What would be the converse of a → b ?

2. What would be the inverse of a → d ?

3. What would be the contrapositive of c → b ?

4. If a → c and c → b, what can you conclude?

5. Let p represent *n* is a whole number and *q* represent *n* is rational number. What is the symbolic representation of "If *n* is not a rational number, then *n* is not a whole number?

6. "If you eat all of your supper, then you get ice cream" is represented by p → q. What is the symbolic representation of "If you don't eat ice cream, then you didn't eat all of your supper"?

7. Consider the following statements:
   p: You run.
   q: I will not shoot you with my taser.
   What is the symbolic representation of "If I shot you with my taser, then you ran"?

Tell what property is demonstrated below.

_____ 8. If AB + BC = XY + BC, then AB = XY

_____ 9. If AB = 6 and AB + BC = 10, then 6 + BC = 10

_____ 10. $\angle AXY = \angle AXY$

_____ 11. If 5•AB = BC, then AB = $\frac{BC}{5}$

_____ 12. If AB = XY, then AB + BC = XY + BC

_____ 13. If AB – NP = BC – NP, then AB = BC

_____ 14. If -1AB = -10, then AB = 10

_____ 15. If AB = BC and BC = XY, then AB = XY

_____ 16. If 2 = AB and AB + BC = XY, the 2 + BC = XY

_____ 17. If $\frac{XY}{3} = 5$, then XY = 15.

_____ 18. What is the area of a circle with a radius of 10 cm?

_____ 19. What is the circumference of a circle with a diameter of 12 cm?

_____ 20. What is the area of a triangle that has a base of 4 cm and a height of 10 cm?

_____ 21. What is the area of a circle with a diameter of 8 cm?

_____ 22. If the perimeter of a triangle is 26 cm with sides of length $n + 6$, $4n$, and $4n + 2$, what is the value of n?

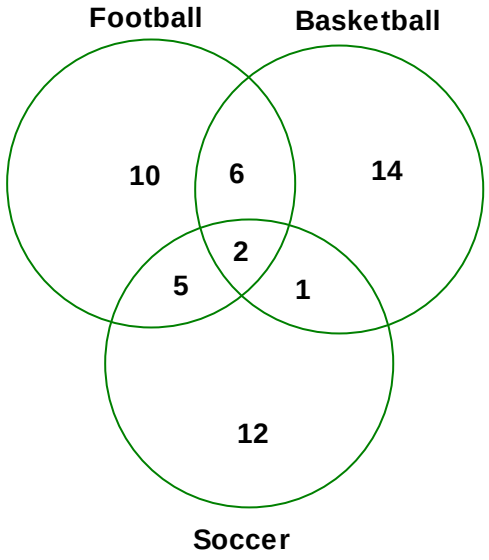
_____ 23. What would make the most sense as to the area of my classroom?
A. 25 ft^2 B. 530 ft^2 C. 2600 ft^2 D. 30,000 ft^2

_____ 24. How many sides does a heptagon have?

_____ 25. How many sides does a nonagon have?

_____ 26. How many sides does a hexagon have?

Consider the following Venn diagram.



_____ 27. How many kids are on the basketball team and the football team?

_____ 28. How many kids are playing all three sports?

_____ 29. How many kids are on the football team?

_____ 30. How many kids play basketball, but no other sport?

_____ 31. How many kids play soccer and basketball?

_____ 32. How many kids are on the basketball team?

_____ 33. I have a total of 18 kids. If 10 of my kids play soccer and 12 play tennis, how many play both tennis and soccer?

_____ 34. In my class everyone plays either soccer or tennis. 14 play soccer and 10 play tennis. If 6 play both tennis and soccer, how many kids are in my class?

_____ 35. In my class all 15 kids have on either a blue shirt or blue pants. If 12 have on a blue shirt and 10 have on blue pants, how many have on a blue shirt, but not blue pants?