NAME _____ DATE _____ Pd _____

QUIZ Review 2.1-2.4 CYU

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Venn Diagram (S, A, N)	1 - 6	1 - 6	1 - 6
If-Then Format	7 - 9	7 - 9	7 - 9
Law of Detachment	10 - 19	10 - 19	10 - 19
Converse, Inverse, Contrapositive	20 - 25	20 - 25	20 - 25
Bi-Conditional, iff	20 - 25	20 - 25	20 - 25
Truth Value	20 - 25	20 - 25	20 - 25
Addition POE/Subtraction POE	26 - 33	26 - 33	26 - 33
Multiplication POE/Division POE	26 - 33	26 - 33	26 - 33
Substitution POE	26 - 33	26 - 33	26 - 33
Reflexive Property	26 - 33	26 - 33	26 - 33
Transitive Property	26 - 33	26 - 33	26 - 33
Symmetric Property	26 - 33	26 - 33	26 - 33
Distributive Property	26 - 33	26 - 33	26 - 33

I. Draw and label a Venn diagram for each of the following.

1. All basketball players are tall.

2. Some dogs can swim.

3. Only well-made toys pass inspection.

4. Some people are incapable of making a commitment.

5. Every cloud has a silver lining.

6. Animals with fur are never cold blooded.

II. Rewrite each of the following statements in "if…then" form.

7. All wizards wear long, pointed hats.

8. No children like to go to bed early.

9. In the Northern Hemisphere, January is a winter month.

III. State a valid conclusion based on the given statements, if possible. Show your reasoning.

10. The Barnhills always have hot dogs on Tuesday. Today is Tuesday.

11. Only bright students get A's. Cole gets all A's.

12. Students who work hard get good grades. Liz gets good grades.

13. If the books fall out, Miss Kosh will laugh. Miss Kosh does not laugh.

14. If the bookcase is made of wood, it is expensive. The bookcase is expensive.

15. Everyone with a green card is a resident alien. Ms. Khan has a green card.

16. If I win the lottery, I will buy a new car. I don't win the lottery.

17. Nobody works at the mill during a strike. Nobody is working at the mill today.

18. Jordan will smile if he finds a new hat. Jordan doesn't find a new hat.

19. People who are happy smile a lot. Tina smiles a lot.

IV. State the Converse, Inverse, and Contrapositive of each of the following. Determine the truth-value of each statement. Then, determine if a bi-conditional statement can be written. If it can, write it. If not, write *not possible*.

20. If I break curfew, then my car will be taken away.

21. If $x = 7$, then $x^2 = 49$.

22. If I read Dr. Seuss, then I will laugh.

23. If I'm a Star-Bellied Sneetches, then I can play on the beaches.

24. If $x = 11$, then $4x - 7 = 37$.

25. If a polygon has eight sides, then it is an octagon.

V. Use the property to copy and complete the statement.

26. Substitution POE: IF AB = 20, then AB + CD = _____.

27. Symmetric POE: If m∠1 = m∠2, then _____.

28. Addition POE: If AB = CD, then AB + EF = _____.

29. Multiplication POE: If AB = CD, then 5 · AB = _____.

30. Subtraction POE: If LM = XY, then LM − GH = _____.

31. Distributive Property: If 5(x + 8) = 2, then _____ + _____ = 2.

32. Transitive POE: If m∠1 = m∠2, and m∠2 = m∠3, then _____.

33. Reflexive POE: m∠ABC = _____.

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*
Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.

1 2	3 4 5	6 7	8
Basic	Intermediate	Advanced	Solved ALL!