1.2 C.A. Translating Verbal Expressions into Algebraic Equations Name: _____

I. Indicate with math symbols what operations are being described by the given word(s). Use +, -, x, or ÷ symbols.

1. Sum _____
2. Product _____
3. Decreased by _____
4. Quotient _____
5. Increased by _____
6. Difference _____
7. More than _____
8. Less than _____
9. Total _____

II. Write a verbal expression for the algebraic expression.

10) $5(a - m^3)$

III. Solve using mental math.

11) $\frac{x}{15} = 4$

12) $\frac{a}{17} = 10$

13) $19 - b = 12$

14) $-14v = 70$

IV. Evaluate and verify.

Check to see if 20 is a solution.

15) $-1 - 5v \leq -16$

16) $1 + \frac{n}{5} > -2$

17) $2x - 2 > 20$

18) $2 + \frac{x}{3} \leq -1$

V. Write an algebraic expression/equation/inequality to the given verbal expression.

20. Eight less than a number

21. A number increased by seven is 16

22. The quotient of m and n

23. 9 times a number squared is less than or equal to 36.

24. A number cubed is at least 64.

25. The total of a number and 7 is 22.

26. Seven more than the cube of a number

27. One-half the product of x and y is at most 15

28. The product of twice a and b *is 24*

29. Twice the ratio of a and b

30. Two less than five times a number

31. Twice a number decreased by three times the number

32. The sum of 3 times a and b

33. Three times the sum of a and b is greater than 24

34. The cube of a plus b

35. The cube of the sum of a and b

36. Your family takes a road trip to Berlin for the weekend. You've driven 120 miles so far, but need to travel m miles total.

    Write an expression representing how many more miles you must travel to reach your destination.

37. You have x Timbits you would like to divvy up evenly between you and 8 friends.

    Write an expression representing how many Timbits each person would get including yourself.