Group Name: _Key_

Variables and Expressions

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

1. sum __+__

2. product __X__

3. decreased by __−__

4. quotient __÷__

5. increased by __+__

6. difference __−__

7. more than __+__

8. less than __−__

9. twice something __x2__

II. Write a verbal expression for the algebraic expression.

10. ab the product of a and b

11. $x + 7$ the Sum of x and seven

12. $2x$ Two times a number

13. m^3 m to the power of 3

14. $x - 6$ Six less than x

15. $8y^2$ eight times a variable squared

16. $\frac{x}{y}$ the quotient of x and y

17. $\frac{1}{2}(x + y)$ half the quantity of x plus y

18. $3x - 4$ four less than three times a number

19. $5(a - b)$ five times the difference between a and b.

III. Write an algebraic expression to the given verbal expression.

20. eight less than a number

$$X - 8$$

21. a number increased by seven

$$X + 7$$

22. the quotient of m and n

$$\frac{m}{n}$$

23. a number squared

$$x^2$$

24. nine times a number

$$9x$$

25. a number decreased by three

$$n - 3$$

26. seven more than the cube of a number

$$7 + n^3$$

27. one-half the product of x and y

$$\frac{1}{2}(xy)$$

28. the product of twice a and b

$$2a \cdot b$$

29. twice the product of a and b

$$2(ab)$$

30. two less than five times a number

$$5x - 2$$

31. twice a number increased by three times the number

$$2(x + 3x)$$

32. the sum of 3 times a and b

$$3a + b$$

33. three times the sum of a and b

$$3(a + b)$$

34. the cube of a plus b

$$a^3 + b$$

35. the cube of the sum of a and b

$$(a + b)^3$$