

Homework: Variables and Expressions

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

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|--------------------|-----------------------|--------------------------|
| 1. sum _____ | 2. product _____ | 3. decreased by _____ |
| 4. quotient _____ | 5. increased by _____ | 6. difference _____ |
| 7. more than _____ | 8. less than _____ | 9. twice something _____ |

II. Write a verbal expression for the algebraic expression.

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|-------------------|--------------------------|
| 10. ab | 11. $x + 7$ |
| 12. $2x$ | 13. m^3 |
| 14. $x - 6$ | 15. $8y^2$ |
| 16. $\frac{x}{y}$ | 17. $\frac{1}{2}(x + y)$ |
| 18. $3x - 4$ | 19. $5(a - b)$ |

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

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| 20. eight less than a number | 21. a number increased by seven |
| 22. the quotient of m and n | 23. a number squared |
| 24. nine times a number | 25. a number decreased by three |
| 26. seven more than the cube of a number | 27. one-half the product of x and y |
| 28. the product of twice a and b | 29. twice the product of a and b |
| 30. two less than five times a number | 31. twice a number increased by three times the number |
| 32. the sum of 3 times a and b | 33. three times the sum of a and b |
| 34. the cube of a plus b | 35. the cube of the sum of a and b |