

Section 2.1 – Variables

Problem Set 1

Write a mathematical expression for each statement using variables where they're appropriate.

1. the sum of 7 and some number
2. take 3 times a number then subtract 8
3. the sum of 5 times one number plus 7 times a second number
4. 14.8 plus one eighth of a number
5. 12 more than 5 times a number
6. a number divided by the sum of a number and 7
7. 12 less than a number

If $x = 2$ then simplify each of the following expressions.

8. $4x - 15$ 9. $x + 8$ 10. $(x + 7) / (x - 7)$ 11. $x / 5 - 3x$

If x can be any of $\{-4, 0, 1\}$ then find all the possible values of the following expressions.

12. $x / 3$ 13. $3x - 2$ 14. $4x + 8$ 15. $(x + 4) / (x + 2)$

If $x = 2$ and $y = -1$ then simplify the following expressions.

16. $3x + y / 18$ 17. $x - 4y$ 18. $(x + 3y - 6) / x$ 19. $(3x + 6) / (y + 2)$