

Section 2.1 – Variables

Problem Set 3

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

- 12.9 plus one third a number
- take 3 times a number then subtract 3
- the sum of 4 times one number plus 8 times a second number
- 14 less than a number
- 11 more than 2 times a number
- a number divided by the sum of a number and 12
- the sum of 9 and some number

If $x = 4$ then simplify each of the following expressions.

8. $(x + 8) / (x - 7)$ 9. $5x - 18$ 10. $x + 9$ 11. $x / 6 + 4x$

If x can be any of $\{-2, 0, 4\}$ then find all the possible values of the following expressions.

12. $(x + 8) / (x + 4)$ 13. $x / 5$ 14. $7x - 3$ 15. $5x + 9$

If $x = 4$ and $y = 0$ then simplify the following expressions.

16. $x - 5y$ 17. $4x + y / 19$ 18. $(x + 4y - 7) / x$ 19. $(4x + 9) / (y + 3)$