

Name

Date

Subtraction of real numbers

Using Rules of Algebra

For all real numbers a and b , $a - b = a + (-b)$. Simply stated: To subtract a number, add its opposite.

$$7 - 10 = 7 + (-10)$$

$$= -3$$

$$5 - 8 + 3 - 1 = 5 + (-8) + 3 + (-1)$$

$$= 5 + 3 + (-8) + (-1) \text{ (group the + and - numbers)}$$

$$= 8 + (-9)$$

$$= -1$$

$$-4 - (-12)$$

$$= -4 + 12$$

$$= 8$$

Change each problem into an addition problem, then solve.

1. $7 - 9$

2. $-6 - (-4)$

3. $-11 - 5$

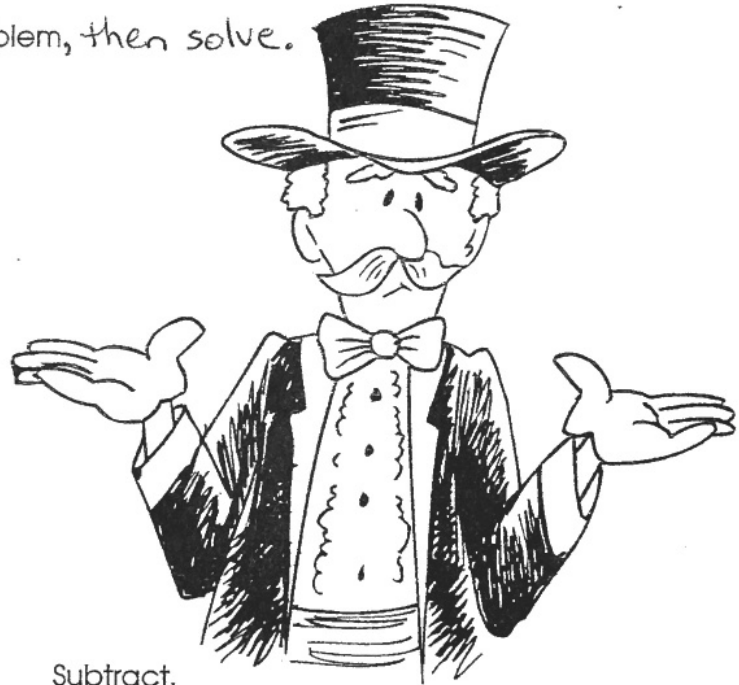
4. $12 - (-15)$

5. $8 - 3$

6. $22 - 5$

7. $4 - 11$

8. $-4 - (-9)$



Subtract.

9. $9 - 11$

10. $0 - (-12)$

11. $-5 - 4$

12. $6 - (-6)$

13. $-1 - (-1)$

14. $-7 - 6$

15. $3 - (-5)$

16. $17 - 23$



Evaluate when $x = -2$, $y = -5$, and $z = 12$.

17. $x - y$

18. $y - x$

19. $x - z$

20. $z - y$