

Subtracting Integers - HOMEWORK

1. How are $5 - 8$ and $5 + (-8)$ similar?
2. Write a subtraction problem involving one positive and one negative integer that has a negative result.
3. Write a subtraction problem involving one positive and one negative integer that has a positive result.
4. Explain why subtracting a negative number is equivalent to adding.

5. Imagine that you received a report of transactions, but one digit in each number was smudged (◆) and unreadable. For each of the following, determine whether the result will be positive, negative, or impossible to determine.

a. $-57◆7 - 43◆$

b. $6◆9 - (-3◆7)$

c. $◆18 - (-◆30)$

d. $-1◆32 - (-79◆)$

6. Write the subtraction of integers problem that is represented by these chips.



7. Draw the chips which represent the problem, and solution, to $5 - (-4)$.

8. Use the return of the sweater scenario to explain the problem $-25 - (-50)$.

9. The subtraction problem $5 - 8$ and the addition problem $5 + (-8)$ both give the result -3 . What different meaning does each problem represent?

In problems 10 – 19, perform the indicated operation, without a calculator.

10. $-5 - 8 =$

11. $-5 - (-7) =$

12. $10 - (-12) =$

13. $-28 - 12 =$

14. $32 - (-18) =$

15. $-18 - 42 =$

16. $-227 - 15 =$

17. $-106 - (-10) =$

18. $-15 - (-5) + 7 =$

19. $-18 + 42 - (-3) - 6 =$

20. Use subtraction to model each of the following.

a. The high temperature in Phoenix one summer day was 108°F . The low temperature that same day was 85°F . What was the difference between the high and the low temperatures that day?

b. The high temperature in Fairbanks one winter day was -25°F . The low temperature that same day was -33°F . What was the difference between the high and the low temperatures that day?

21. On Monday morning you purchased stock. By the close of the day, the price rose \$2. On Tuesday it rose \$6. Wednesday, it fell \$11. Thursday it fell another \$17 and on Friday it rose \$7. Represent the situation with addition and subtraction of integers. Determine the net change in the price of the stock for the week.

22. One year Russell hiked to the top of Mt. Whitney (elev. 4417 m) in California. Later that year he visited the Badwater, CA (elev -86 m) in Death Valley. What was the total difference in elevation that Russell experienced that year?

23. Clarissa was on a weight-loss program one year. She weighed 165 lb to start. The first month Clarissa lost 6 lb. The second month she lost 7 lb. The third month she went on vacation and gained 1 lb. Represent the situation with addition and subtraction of integers. How much did Clarissa weigh at the end of the third month?