

Finding outputs of a two-step function with decimals that models a real-world situation: Two variable equation: Worksheet 8.1

Name Date Score

1. John rented a truck for one day. There was a base fee of \$50. And there was an additional charge of \$2 for each mile driven. The total cost in dollars for driving x miles is given by the following function $C(x) = 50 + 2x$. What is the rental cost if John drove 20 miles?
2. Oceania Bike Rentals charges 15 dollars plus 6 dollars an hour for renting a bike. Total amount to be paid is given by the function $T(h) = 15 + 6h$, where h is the number of hours. What total amount Sandy has to pay if he rented a bike for 7 hours?
3. The sum of three consecutive numbers is given by the function $3n + 3$ where n is the smallest number. If the smallest of the three numbers is 39 what is the sum of the three consecutive numbers?
4. A small pond has 600 liters of water to start with. Water is added to the pond at the rate of 40 liters per minute. If water is added for t minutes the total capacity of the pond T is given by $T = 600 + 40t$. Find the capacity of the pond after a period of 21 minutes.
5. The money Nancy had spent on books is given by the function $T = 12 + 8b$ where b is the cost of one book. How much did she spend if cost of each book is \$9?
6. The number of books Ron has is given by the function $T(x) = 0.5x + 18$, where x is the number of books he has initially. How many books does he have now, if $x = 12$?
7. The amount that Jessica has is given by the function $A(x) = 0.5x + 7$, where x is her allowance in dollars. What is the amount she has if her allowance is 16 dollars?
8. The number of students who went on a trip to the zoo is given by the function $N(s) = 9s + 15$ where s is the number of students traveling in each bus. How many students went to the zoo if $s = 30$?



Solutions: Worksheet 8.1

- The number of cards Tom has is given by the function $T(k) = 0.75k + 41$, where k is the number cards in a pack. Find the number of cards Tom has if $k = 52$?
- The sum of three consecutive odd numbers is given by the function $S(n) = 3n + 6$, where n is the smallest of the three given odd numbers. If $n = 13$, what is the sum of the three consecutive odd numbers?

Solutions: Worksheet 8.1

- \$90
- \$57
- 120
- 1440 liters
- \$84
- 24 books
- \$15
- 285 students
- 80 cards
- 45

