Finding outputs of a two-step function with decimals that models a real-world situation: Two variable equation: Worksheet 8.2

Name ..... Date ..... Score .....

1. John rented a truck for one day. There was a base fee of $60. And there was an additional charge of $3 for each mile driven. The total cost in dollars for driving x miles is given by the following function C(x) = 60 + 3x. What is the total cost if John drove 25 miles?

2. Oceania Bike Rentals charges 18 dollars plus 5 dollars an hour for renting a bike. Total amount to be paid is given by the function T(h) = 18 + 5h, where h is the number of hours. What total amount Sandy has to pay if he rented a bike for 6 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 40 what is the sum of the three consecutive numbers?

4. A small pond has 500 liters of water to start with. Water is added to the pond at the rate of 30 liters per minute. If water is added for t minutes the total capacity of the pond T is given by T = 500 + 30t. Find the capacity of the pond after a period of 20 minutes.

5. The money Nancy had spent on books is given by the function T = 15 + 6b where b is the cost of one book. How much did she spend if cost of each book is $8?

6. The number of books Ron has is given by the function T(x) = 0.5x + 22, where x is the number of books he has initially. How many books does he have now, if x = 16?

7. The amount that Jessica has is given by the function A(x) = 0.6x + 10, where x is her allowance in dollars. What is the amount she has if her allowance is 18 dollars?

8. The number of students who went on a trip to the zoo is given by the function N(s) = 8s +12 where s is the number of students traveling in each bus. How many students went to the zoo if s = 20?

9. The number of cards Tom has is given by the function T(k) = 0.8k + 12, where k is the number cards in a pack. Find the number of cards Tom has if k = 50?

10. 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 =17, what is the sum of the three consecutive odd numbers?

Solutions: Worksheet 8.2

1. $135
2. $48
3. 123
4. 1100 liters
5. $63
6. 30 books
7. $20.80
8. 172 students
9. 52 cards
10. 57