

NAME: \_\_\_\_\_

*P.I. A.A.6: Analyze and solve verbal problems whose solution requires solving a linear equation in one variable*

1. The sum of three consecutive odd numbers is 93. Find the numbers.

[A] 29, 30, 31              [B] 29, 31, 33  
[C] 27, 31, 35              [D] 30, 31, 32

2. Find three consecutive integers with sum 168. Which is the greatest of the three?

[A] 59      [B] 57      [C] 19      [D] 53

3. Find three consecutive integers with sum 204.

4. Find three consecutive integers with sum  $-99$ .

5. Find three consecutive odd integers such that the sum of the first and third equals the sum of the second and 31.

6. Find three consecutive odd integers such that the sum of the first and third equals the sum of the second and 43.

7. Find four consecutive even integers such that 2 times the sum of the first and second is 14 more than 3 times the fourth.

8. Find four consecutive even integers such that if the sum of the first and third is multiplied by 4 the result is 10 more than 7 times the fourth.

9. Find four consecutive even integers such that if the sum of the first and third is multiplied by 5 the result is 12 more than 8 times the fourth.

10. The daily cost of renting a car is \$25 plus \$0.50 per mile traveled. If Effie paid \$129.00 for a day's rental, how many miles did she travel?

[A] 208      [B] 21      [C] 308      [D] 258

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11. A T-shirt manufacturer spends \$1200 each day on costs plus \$3 per shirt for labor and materials. The T-shirts sell for \$12 each. How many T-shirts must the company sell in one day to make a profit of \$500?
12. It costs \$5 for admission to the amusement park and \$1.50 for each ride. Fred spent \$14 on admission and rides. How many rides did he take?
13. A health insurance policy requires that each person covered pay the first \$300 of a bill and then 0.2 times the rest of the bill. Fran is covered by this policy and had to pay \$500. What was her total bill?
14. Compact disks are on sale for \$2 off the regular price. Suppose you buy two CDs and pay a total of \$13.98. What is the regular price of each CD?
15. Suppose you must maintain a balance of at least \$800 in your checking account in order to have free checking. The balance in your account is \$849.50 before you write a check for \$45. How much cash can you withdraw from the account and still have free checking?
16. Keisha has 28 video cassettes, which is 8 less than 4 times the number of cassettes in Minnie's collection. How many video cassettes does Minnie own?
17. Use any problem solving strategy to solve the following problem. Mandy decides to promote the new product she is selling by offering a \$100 discount for customers ordering 12 or more units of the new product. If Neil orders 12 units and receives a bill for \$620, what is the price of each unit?

- [1] B
- [2] B
- [3] 67, 68, 69
- [4] -34, -33, -32
- [5] 29, 31, 33
- [6] 41, 43, 45
- [7] 28, 30, 32, 34
- [8] 36, 38, 40, 42
- [9] 20, 22, 24, 26
- [10] A
- [11] 189 T-shirts
- [12] 6
- [13] \$1300
- [14] \$8.99
- [15] \$4.50
- [16] 9
- [17] \$60