Chapter 3

Please show all your work for every problem. Circle your final answer.

Solve the equation.

1. 3x – 2 = -11
2. 13 – 9x = -14
3. (x + 4) = 3
4. 5d – 2 + 2d = 9 – 4d
5. 5(3 – 2x) + 4x = 3
6. 6(7-2p) = 3(5p + 1)

Solve the proportions.

7. 8. 9.

10. The ratio of weight on the moon to weight on Earth is 1:6. How many pounds would a 144-pound person weigh on the moon? Write a proportion to represent.

Solve the percent problem.

11. What percent of 125 is 25?

12. What number is 65% of 180?

Write the equation in function form.

13. 6x + y = 7

14. 38 – 11y = 44x + 5

Show your work or give the reason for why you selected you answer.

15. The perimeter of the triangle shown is 28 meters. What is the value of x?

1. 1
2. 4

(x + 1) m

2x m

1. 5
2. 10
3. 27

(2x + 2) m

16. What is the first step in solving the equation

1. Add 1 to each side.
2. Divide each side by 12.
3. Subtract 5 from each side.
4. Add 5 to each side.

17. A pizza shop charges $7.00 for a large pizza plus $0.95 for each additional topping. You have $15 to spend on a large pizza. Write an equation to represent the situation.