More If Statement Problems

1) Write a program that asks the user to input a number. Your program should then determine if that number is even or odd.

    Hint: All even numbers when divided by 2 give a remainder of 0.

2) Write a program that asks the user to input a number. Your program should then output the absolute value of that number.

    Hint: Absolute value of -7 is 7. Absolute value of 7 is 7.

3) Write a program that asks the user to input the month. The program should then output the number of days in the month. Assume a non leap year.

4) Write a program that asks the user to input the lengths of the three sides of a triangle. Your program should then determine if the triangle can be classified as any of the following:

    Equilateral, isosceles, scalene, right

5) Write a program that asks the user to input the weight of a letter in grams, determine the cost of the postage given the following information:

    Up to 30 g: $0.48
    Up to 50 g: $0.70
    Up to 100 g: $0.90
    $0.18 more for each 50 g or less after that.

6) Write a program that asks the user to input a card number. Your program should then output the suit and value of that card. For example, Queen of Spades. Hearts are cards numbered 1 to 13. Diamonds are cards numbered 14 to 26. Spades are cards numbered 27 to 39 and clubs are cards numbered 40 to 52.

7)   Write a program that asks the user to enter the a, b, and c for the equation $ax^2 + bx + c$.

Your program should continue to calculate the discriminant of that quadratic to determine if the quadratic equation has two real roots, one unique root, or no real roots.

Hint: Discriminant Formula: $D = b^2 - 4ac$

If D > 0, two real roots.

If D = 0, one unique root.

If D < 0, no real roots

8)   Write a program that asks the user to input a single digit. Your program should then output that digit in words. For example, 9 is output as nine.

9)   Write a program that asks the user to input their birth date. Your program then needs to output the astrological sign of that person.

Hint: You will need to look up the dates.

Note: Dates are entered as a string, such as September 23