

Math Circus

Fill in the subtraction, multiplication and division methods for this game. Make sure that answers are positive (subtraction) and even (division). Make sure that the total increases accurately.

For example:

Welcome to the Math Circus!

You have 0 out of 0 questions correct.

*****Menu Options*****

a) addition
b) subtraction
c) multiplication
d) division
q) quit
Choice > a

$5 - 1 = 78$

That was incorrect. It was 4.

You have 0 out of 1 questions correct.

*****Menu Options*****

a) addition
b) subtraction
c) multiplication
d) division
q) quit
Choice > a

$5 * 3 = 15$

You got it right!

You have 1 out of 2 questions correct.

*****Menu Options*****

a) addition
b) subtraction
c) multiplication
d) division
q) quit
Choice > q

Good bye!

Starter Code:

```
public class mathCircus
{
    public static void main (String args[])
    {
        new mathCircus ();
    }
}
```



```

public mathCircus ()
{
    char choice = 'a';
    int points = 0;
    int done = 0;
    System.out.println("Welcome to the Math Circus!");
    while (choice != 'q')
    {
        System.out.println ("\nYou have " + points + " out of " + done + " questions correct.\n");
        System.out.println ("*****Menu Options*****");
        System.out.println ("a) addition");
        System.out.println ("b) subtraction");
        System.out.println ("c) multiplication");
        System.out.println ("d) division");
        System.out.println ("q) quit");
        choice = IBIO.inputChar ("Choice > ");
        System.out.println ("");
        done++;
        if (choice == 'a')
            points += addition ();
        else if (choice == 'b')
            points += subtraction ();
        else if (choice == 'c')
            points += multiplication ();
        else if (choice == 'd')
            points += division ();
        else if (choice != 'q')
        {
            done--;
            System.out.println ("Please enter an option in the menu");
        }
    } //while loop
    System.out.println ("Good bye!");
} //constructor

public int addition ()
{
    int a = (int) (Math.random () * 6) + 1;
    int b = (int) (Math.random () * 6) + 1;
    int guess = 0;
    int ans = a + b;
    guess = IO.inputInt (a + " + " + b + " = ");
    if (guess == ans)
    {
        System.out.println ("You got it right!");
        return 1;
    }
    else
    {
        System.out.println ("That was incorrect. It was "+ans+".");
        return 0;
    }
} //addition

public int subtraction ()
{
    return 0;
}

public int multiplication ()
{
    return 0;
}

public int division ()
{
    return 0;
}
}

```