

Complete the following quiz questions and return the sheet to your TA. Do this at the start of the lab session.

1. [8 points] Provide the output for each statement.
  - A. `System.out.println("15" + 20);` [Answer] 1520
  - B. `System.out.println(15 + 20);` [Answer] 35
  - C. `System.out.println("" + 15 + 20);` [Answer] 1520
  - D. `System.out.println("10" + (15 + 20));` [Answer] 1035
  - E. `System.out.println( 5 / 2 );` [Answer] 2
  - F. `System.out.println( 5.0 / 2 );` [Answer] 2.5
  - G. `int x = (int)(3.5 + 2); System.out.println(x);` [Answer] 5
  - H. `System.out.println(7 % 2);` [Answer] 1
2. [2 points] Complete the following program to divide an integer (dividend) by another integer (divisor) and print the result. Even though the operands are integers, **this program should produce an exact result**. Explain your solution.  
*If you don't know how to answer this question, explain your thoughts to receive partial credit.*

```
/**
This program performs an exact division between two numbers

@param args command line arguments
*/
public static void main(String[] args) {
    Scanner s = new Scanner(System.in);
    int dividend = s.nextInt();
    int divisor = s.nextInt();

    // insert your code here
    double result = (double)dividend / divisor;
    System.out.println(result);
}
```

**Explanation:** [Answer] We need to perform casting to do a real division.