

Name:

Timeline: 1 class

Exercise 1

Type in following lines and test the program: Filename: MathFunctions1.pde

1. //Declaration Section	22. //Output-Math Calculations & Display
2. int num1;	23. void display()
3. int num2;	24. {
4. int answer,answer1,answer2;	25. print("Math Equation is:\t\t");
5. float answer3,answer4;	26. println("Result\t");
6. //Title	27. //Addition
7. void title()	28. answer=(num1+num2);
8. {	29. println (num1,"+", num2, "\t\t\t", "=",
9. println("Math Testing	answer);
Program");	30. //Subtraction
10. }	31. answer1=(num1-num2);
11. //Introduction	32. println (num1,"-", num2, "\t\t\t", "=",
12. void introduction()	answer1);
13. {	33. //Multiplication
14. title();	34. answer2=(num1*num2);
15. print("This program will do all	35. println (num1,"*", num2, "\t\t\t", "=",
four math functions");	answer2);
16. println("with two numbers	36. //Division
entered by you!");	37. answer3=(num1)/ num2);
17. }	38. println (num1,"/", num2, "\t\t\t", "=",
18. //Input	answer3);
19. void userInput()	39. answer4=(float(num1)/float(num2));
20. {	40. println (num1,"/", num2, "\t\t\t", "=",
21. num1=getInt("Enter an integer	answer4);
number:");	41. }
22. num2=getInt("Enter a second	42. //Main Program
integer number:");	43. void setup()
23. }	44. {
	45. introduction();
	46. userInput();
	47. display();
	48. }

Run the above program several times. Use the following values for num1 and num2. Fill in the missing values for result for each of the math functions.

If there is an error or any abnormal results on any line, write the error message in the box under each pair of numbers.

input		Results
num1	num2	answer
20	30	20 + 30 = 50
		20 - 30 = -10
		20 * 30 = 600
		20 / 30 = 0.0
		0.6666667
35	7	35 + 7 = 42
		35 - 7 = 28
		35 * 7 = 245
		35 / 7 = 5.0
		5.0
44	7	44 + 7 = 51
		44 - 7 = 37
		44 * 7 = 308
		44 / 7 = 6.0
		6.285714
120	0	120 + 0 = 120
		120 - 0 = 120
		120 * 0 = 0
		120 / 0 =
150	w	150 + w =
		150 - w =
		150 * w =
		150 / w =

ArithmeticException: / by zero

w cannot be resolved to a variable

