

Mr. G's Math Marvels

Handout #41

Function Machines

Mr. G.'s function machine looks a great deal like a camera. However, every time he looks into the viewfinder, a two digit number appears. When he presses the button on the camera, a new two digit number appears. Can you help Mr. G. to figure out the rule for obtaining the new number?



Input	Output
12	22
13	23
20	30

What is the rule?

31	43
24	36
28	40

What is the rule?

Input	Output
32	57
16	41
23	48

What is the rule?

43 34
37 28
21 12

What is the rule?

47 24
53 30
31 8

What is the rule?

Finally Mr. G. figured out how to set the function machine so that he could make the rule for the output. The functions are listed below. Fill in the blanks with the output.

Add 18

Input	Output
12	_____
23	_____
28	_____
37	_____
45	_____

Add 37

Input	Output
45	_____
62	_____
11	_____
37	_____
53	_____

Subtract 26

Input	Output
47	_____
71	_____
61	_____
85	_____
34	_____

Subtract 43

Input	Output
85	_____
59	_____
72	_____
57	_____
61	_____