Guiding Question: Can I add, subtract, and multiply functions?

p. 20-21	Function Operations	6.6
1		

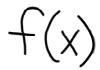
Warm-up: Simplify the following completely, if possible

Mathematical Operations

p .21

The function operations we will focus on in this section are Addition, Subtraction and Multiplication

Operation	Function Notation			
Addition	(f+g)(x)	means	f(x)+g(x)	
Subtraction	(f-g)(x)	means	f(x) - g(x)	
Multiplication	$(f \cdot g)(x)$	means	$+(x)\cdot g(x)$	



Practice: perform the indicated operations using the given functions.

$$f(x) = \sqrt{x} + 9$$
 and $g(x) = \sqrt{x} + 2$

1.
$$(f+g)(x)$$

 $f(x) - g(x)$
 $f(x)$

Practice: perform the indicated operations using the given functions.

$$f(x) = (\sqrt{x} + 9) \quad \text{and} \quad g(x) = (\sqrt{x} + 2)$$
3. $(f \cdot g)(x)$

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You try: perform the indicated operations using the given functions.

$$f(x) = \sqrt{x} + 4$$
 and $g(x) = \sqrt{x} + 5$

4.
$$(f+g)(x)$$

5. $(f-g)(x)$
 $\int X + 4 + \int X + 5$
 $\int X + 4 - (\int X + 5)$
 $\int X + 4 - \int X - 5$
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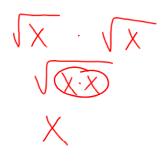
You try: perform the indicated operations using the given functions.

$$f(x) = \sqrt{x} + 4 \quad \text{and} \quad g(x) = \sqrt{x} + 5$$

$$6. \quad (f \cdot g)(x)$$

$$\times + 5 \int X + 4 \int X + 20$$

$$\times + 9 \int X + 20$$



Guiding Question:

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Homework - Worksheet

Test is on Thursday!