Name: _____ Date _____

Topic : Composition of Functions - Worksheet 1

Using $f(x) = 4x + 3$ and $g(x) = x - 2$, find:

1. $f(g(5))$

2. $g(f(-6))$

3. $f(f(7))$

4. $g(f(x))$

Using $f(x) = 6x^2$ and $g(x) = 14x + 4$ find:

5. $(f \circ g)(x)$

6. $(g \circ f)(x)$

7. **Are these two answers the same? What does this information tell you about composition?**

The notation $[x]$ means the greatest integer not exceeding the value of x.
Given $f(x) = [x]$, $g(x) = 12x$ and $h(x) = 6/x$ find:

8. $(f \circ g)(5)$

9. $(f \circ h)(x)$

10. $(h \circ f)(3)$

Name: _____ Date _____

Topic : Composition of Functions - Worksheet 2

Using $f(x) = 5x + 4$ and $g(x) = x - 3$, find:

1. $f(g(6))$
2. $g(f(-7))$
3. $f(f(8))$
4. $g(f(x))$

Using $f(x) = 8x^2$ and $g(x) = 2x + 8$ find:

5. $(f \circ g)(x)$
6. $(f \circ g)(x)$
7. Are these two answers the same? What does this information tell you about composition?

The notation $[x]$ means the greatest integer not exceeding the value of x. Given $f(x) = [x]$, $g(x) = 15x$ and $h(x) = 8/x$ find:

8. $(f \circ g)(6)$
9. $(f \circ h)(4)$
10. $(h \circ f)(4)$

Name: _____ Date _____

Topic : Composition of Functions - Worksheet 3

Using $f(x)=6x+2$ and $g(x)= x-5$, find:

1. $f(g(7))$
2. $g(f(3))$
3. $f(f(2))$
4. $g(g(x))$

Using $f(x)=2x^2$ and $g(x) =3x+4$ find:

5. $(g \circ f)(5)$
6. $(f \circ g)(5)$
7. **Are these two answers the same? What does this information tell you about composition?**

The notation $[x]$ means the greatest integer not exceeding the value of x. Given $f(x) = [x]$, $g(x) =8x$ and $h(x) =5/x$ find:

8. $(f \circ g)\ (4)$
9. $(f \circ h)\ (2)$
10. $(h \circ f)\ (x)$

Name: _____ Date _____

Topic : Composition of Functions - Worksheet 4

Using $f(x) = 7x + 4$ and $g(x) = 2x - 4$, find:

1. $f(g(3))$

2. $g(f(4))$

3. $f(f(3))$

4. $g(g(5))$

Using $f(x) = 8x$ and $g(x) = 4x + 2$ find:

5. $(g \circ g)(x)$

6. $(f \circ f)(x)$

7. **Are these two answers the same? What does this information tell you about composition?**

The notation $[x]$ means the greatest integer not exceeding the value of x.
Given $f(x) = [x]$, $g(x) = 4x$ and $h(x) = 4/x$ find:

8. $(f \circ g)(x)$

9. $(f \circ h)(4)$

10. $(h \circ f)(2)$

Name: _____ Date _____

Topic : Composition of Functions - Worksheet 5

Using $f(x) = 8x + 5$ and $g(x) = 7x - 2$, find:

1. $f(g(4))$

2. $g(f(6))$

3. $f(f(3))$

4. $g(g(2))$

Using $f(x) = 7x^2$ and $g(x) = 5x + 1$ find:

5. $(g \circ g)(2)$

6. $(f \circ f)(2)$

7. **Are these two answers the same? What does this information tell you about composition?**

The notation $[x]$ means the greatest integer not exceeding the value of x.
Given $f(x) = [x]$, $g(x) = 6x^2$ and $h(x) = 6/2x$ find:

8. $(f \circ g)\ (3)$

9. $(f \circ h)\ (5)$

10. $(h \circ f)\ (3)$