Name _____ Date _____
Mr. Schlansky Algebra II

Transforming Points

1. If (2,4) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x) + 3$.

2. If (2,4) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x + 3)$.

3. If (5,1) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x - 5)$.

4. If (4,7) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x) - 2$.

5. If (-3,4) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x - 4)$.

6. If (-3,-2) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x) + 4$.

7. If (3,5) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x + 4) - 7$.

8. If (4,-6) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(x - 1) + 3$.

9. If (-2,4) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = 2f(x)$.

10. If (-2,4) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(2x)$.

11. If (4,-8) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = \frac{1}{2}f(x)$.

12. If (4,-8) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f\left(\frac{1}{2}x\right)$.

13. If (-3,2) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f\left(\frac{1}{3}x\right)$.

14. If (2,-1) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = 4f(x)$.

15. If (-8,1) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = f(4x)$.

16. If (-3,-5) is included in $f(x)$, what point must be included in $g(x)$ if $g(x) = 2f(x)$.

17. The function f(x) is given by the following table of values. Which table of values would represent g(x) if g(x) = f(x) + 5?

x	f(x)
1	2
2	4
3	8

1)

x	g(x)
5	2
6	4
7	8

2)

x	g(x)
1	7
2	9
3	13

3)

x	g(x)
1	-3
2	-1
3	3

4)

x	g(x)
-4	2
-3	4
-2	8

18. The function f(x) is given by the following table of values. Which table of values would represent g(x) if g(x) = f(x + 5)?

x	f(x)
1	2
2	4
3	8

1)

x	g(x)
5	2
6	4
7	8

2)

x	g(x)
1	7
2	9
3	13

3)

x	g(x)
1	-3
2	-1
3	3

4)

x	g(x)
-4	2
-3	4
-2	8

19. The function f(x) is given by the following table of values. Which table of values would represent g(x) if g(x) = f(2x)?

x	f(x)
2	18
4	10
8	2

1)

x	g(x)
2	36
4	20
8	4

2)

x	g(x)
1	18
2	10
4	2

3)

x	g(x)
2	9
4	5
8	1

4)

x	g(x)
4	18
8	10
16	2

20. The function f(x) is given by the following table of values. Which table of values would represent g(x) if g(x) = 2f(x)?

x	f(x)
2	18
4	10
8	2

1)

x	g(x)
2	36
4	20
8	4

2)

x	g(x)
1	18
2	10
4	2

3)

x	g(x)
2	9
4	5
8	1

4)

x	g(x)
4	18
8	10
16	2