Bronx Community College, CUNY

MTH30 Pre - Calculus

Quiz 5
(Section 1.6)

Solutions & Answers

Name: _____

1. Assume we are given a graph of function $f(x)$. We want to graph function $g(x) = 2f(x+7)-10$. List the transformations (in order) we need to do to get the graph of $g(x)$ from the graph of $f(x)$.

1st transformation: Horizontal shift (7 units left)

2nd transformation: Vertical stretching (y-coord. times 2)

3rd transformation: Vertical shift (10 units down)

$g(x) = 2\ f(x+7)\ -10$

③ Vertical shift (10 units down)

① Horizontal shift (7 units left)

② Vertical stretching (each point's y-coordinate is multiplied by 2)

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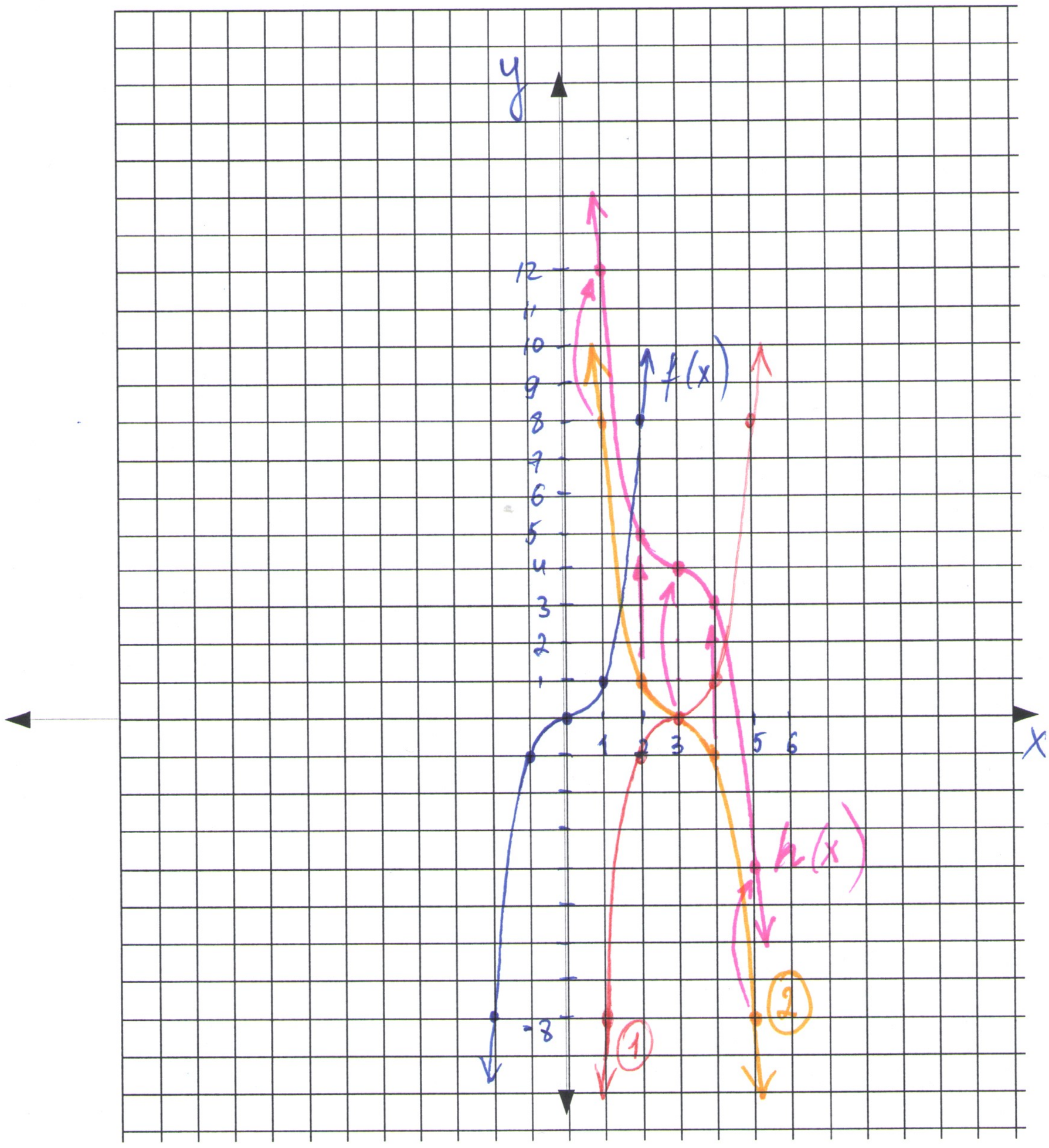
2. Use the graph of function $f(x) = x^3$ to graph function $h(x) = -(x-3)^3+4$.
Show all the transformations.

x	x^3
0	0
1	1
2	8
-2	-8
-1	-1



③ vertical shift (4 units up)

$h(x) = -(x-3)^3+4$

① horizontal shift (3 units right)

② reflection about x-axis