Name:

<u>Section 2.4 – Transformations</u>

1. Write the equation of the transformed function

If
$$f(x) = x^3 - x^2 - x + 1$$

If
$$f(x) = 2x^2$$

and we have a reflection in the y - axis

and we have a horizontal expansion by a factor of 2

If
$$f(x) = 4x - 5$$

If
$$f(x) = -x^3 + 2x^2 - 4$$

and we have a vertical shift down 7 units

and we have a reflection in the x-axis

2. If (3, -5) is on f(x) which point is on:

a)
$$|f(x)|$$

b)
$$\frac{1}{f(x)}$$

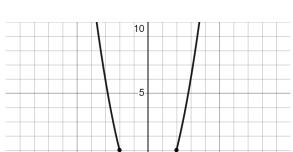
-10

3. Graph the following transformation given the original graph.

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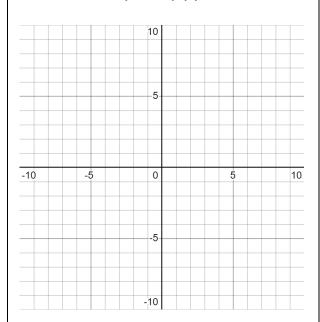
Find the desired Composite Functions and State the Domain:

$$y = f(x)$$

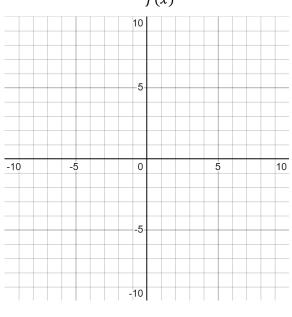


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$$y = -2f(x)$$



$$y = \frac{1}{f(x)}$$



$$y = f(x+2)$$

