Reflection Questions  
  
After you’re done with **everything**, please come back and answer these questions.

1. Which transformation made the graph move to the left? How many spaces did it move?
2. Which transformation made the graph move down? How many spaces did it move?
3. Which transformation made the graph move to the right? How many spaces did it move?
4. Which transformation made the graph move up? How many spaces did it move?
5. Which transformation made the graph get steeper or skinnier?
6. Which transformation made the graph get flatter or wider?
7. Which transformation made the graph flip over?

Directions

1. Remember what we discussed about Parent Functions earlier today.
2. Use a colored pencil or pen.
3. Open up your envelope. Make sure you have 24 cards.
4. Find all the cards for Transformation 1 only.
5. Match each card to the correct parent function. Write in the equation from the card underneath the graph in the box that says New Equation. Please **do not** write on the cards.
6. Now, go to Y= on your calculator and type in the new equation. Zoom and 6 to graph.
7. Sketch the graph from your calculator as closely as you can onto the worksheet with your colored pencil.
8. Compare the original graph to the one you just sketched. Finally answer the question “What happened to the graph?” Continue doing this for the other graphs in Transformation 1.
9. When you are done, please continue on to Transformation 2 and repeat this process.
10. Thank you for your hard work. ☺

**Hint #1:** The absolute value symbol can be found by clicking MATH, go right to NUM and click #1 abs(

**Hint #2:** Remember, if x is in the exponent like 3x, then you should use the ^ key on the calculator: 3^x.

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
|  |  |  |  |
| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| --- | --- | --- | --- |
| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
|  |  |  |  |
| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
|  |  |  |  |
| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
|  |  |  |  |
| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
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| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
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| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
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| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |

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| --- | --- | --- | --- |
| Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: | Parent Function:  Equation: |
|  |  |  |  |
| New Equation: | New Equation: | New Equation: | New Equation: |
| What happened to the graph? | What happened to the graph? | What happened to the graph? | What happened to the graph? |