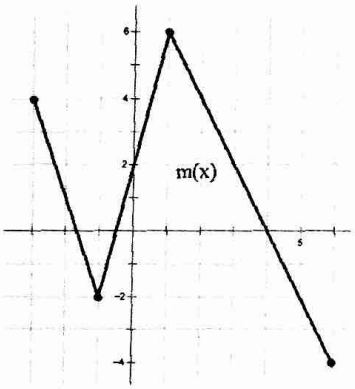
Algebra 2 Function Notation Transformations WS #24

Given the function $y = m(x)$, pick 9 of the following equations. Write down all the transformations and graph them.

Double transformations:

1. $y = -m(x+4)$
2. $y = 3m(x-2)$
3. $y = 3 + m(-x)$



Triple transformations:

4. $y = \frac{1}{2}m(x-4)-3$
5. $y = -m(\frac{2+x}{3})$
6. $y = 4m(3-x)$

Quadruple transformations:

7. $y = 5 - m(3-x)$
8. $y = -3m(\frac{4+x}{2})$
9. $y = 2 + m(\frac{3-x}{4})$

Quintuple transformations:

10. $y = 3 + 5m(\frac{-(x+2)}{4})$
11. $y = -2m(\frac{-(x-3)}{5})$
12. $y = -5 - 3(\frac{x-4}{2})$

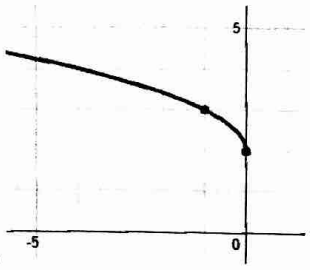
Sextuple transformations!!

13. $y = 2 - 4m(\frac{-(x+3)}{5})$
14. $y = -3 - \frac{1}{2}m(\frac{-(x-5)}{4})$
15. $y = 4 - 2m(\frac{-x-3}{5})$

Write the equation for 9 of the following graphs:

Double transformations:

16.



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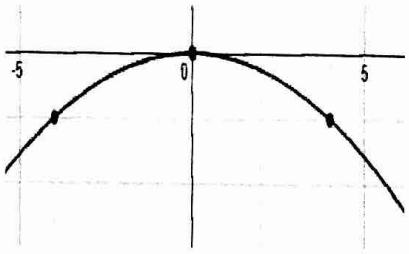

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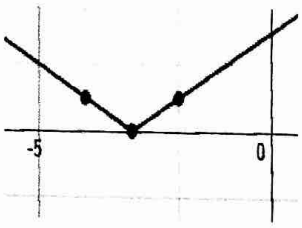
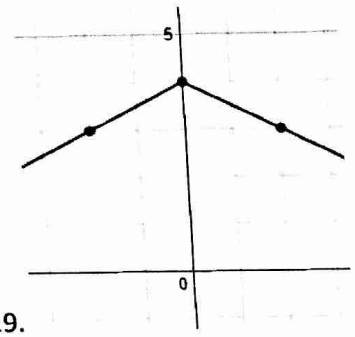


Triple transformations:



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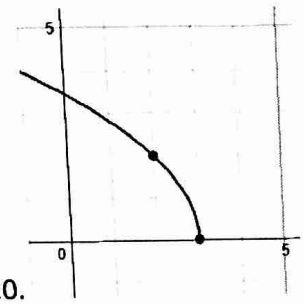

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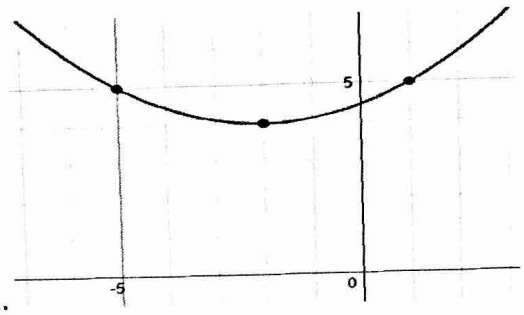
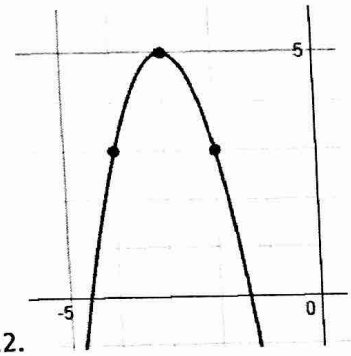


21.

Quadruple transformations:



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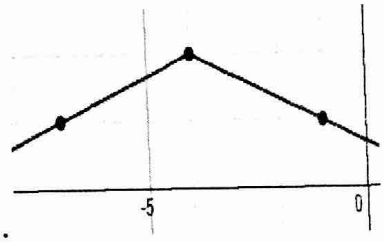

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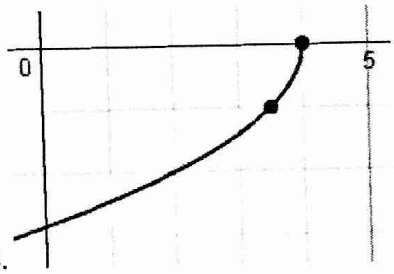
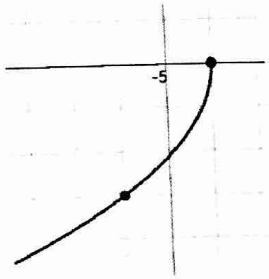


24.

Quintuple transformations:



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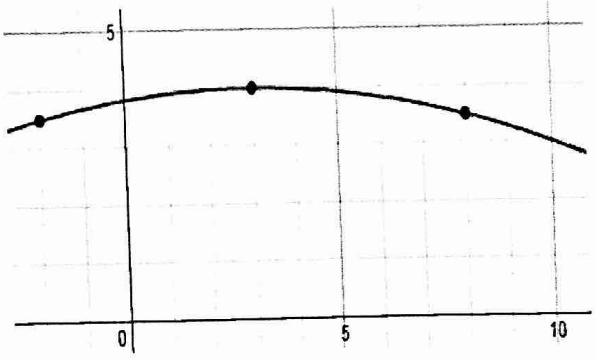

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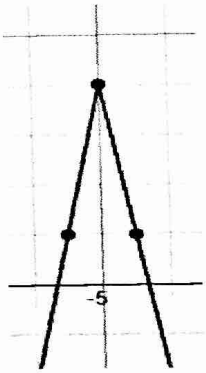
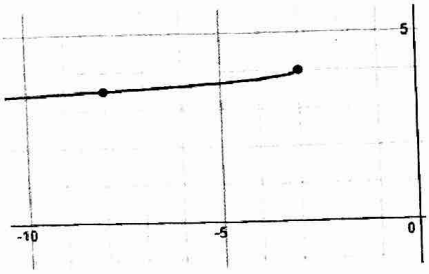


27.

Sextuple transformations!!



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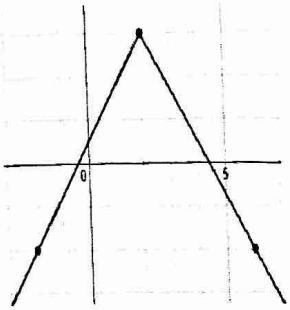

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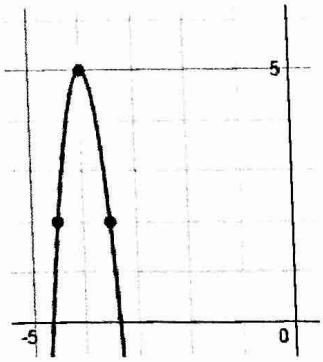

30.