

Graphing Equations: Transformations 2.1

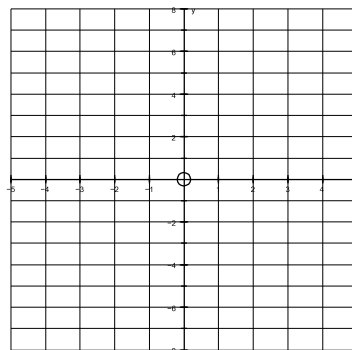
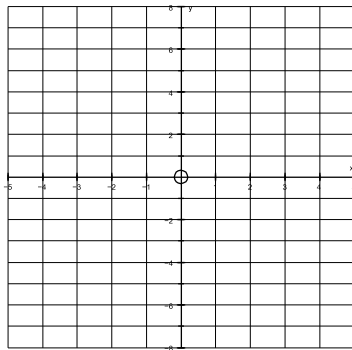
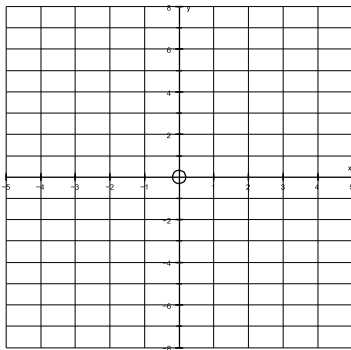
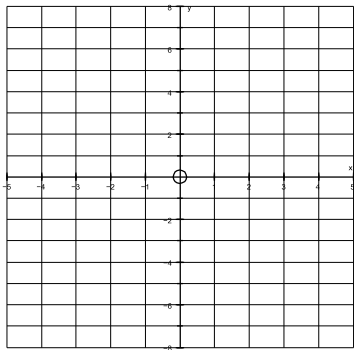
Graph the following equations with their parent graphs. Describe the transformation beneath each graph.

1) $y = (x - 2)^2$

2) $y = \sqrt{x} + 2$

3) $y = -|x + 1| - 3$

4) $y = 2^x + 3$



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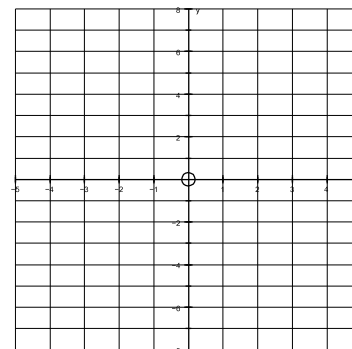
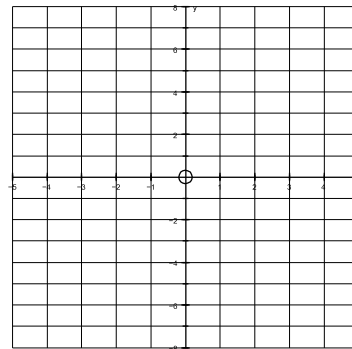
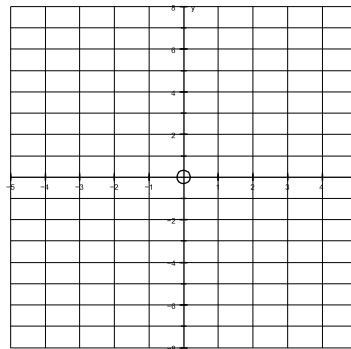
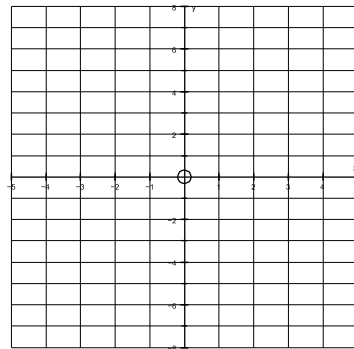
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5) $y = \sqrt{-x - 3} - 1$

6) $y = -\log_2 x$

7) $y = x + 4$

8) $y = 2^{-x} - 1$



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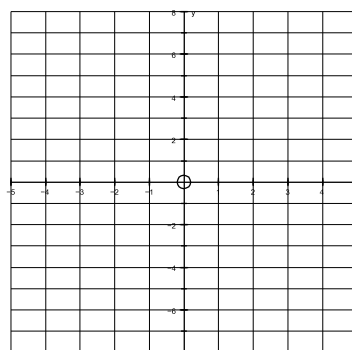
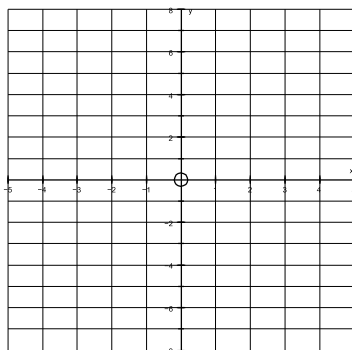
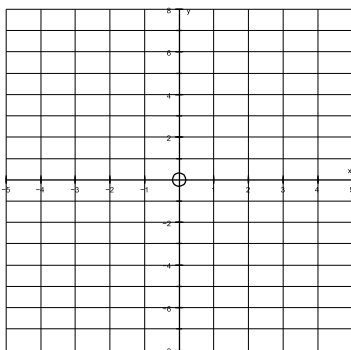
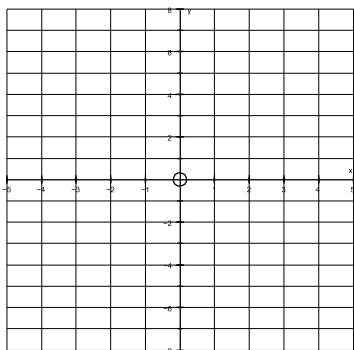
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9) $y = \log_2(-x)$

10) $y = \log_2(x + 2)$

11) $y = -2^x - 3$

12) $y = 2^{x+3}$



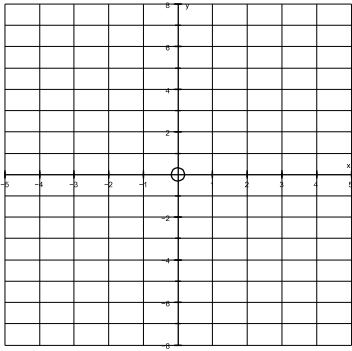
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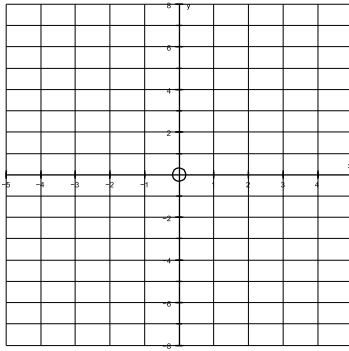
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13) $y = \log_2(x+2) + 1$



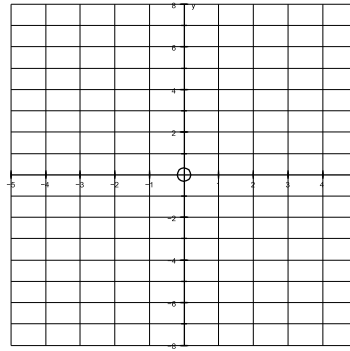
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14) $y = 2(x+2)^2$



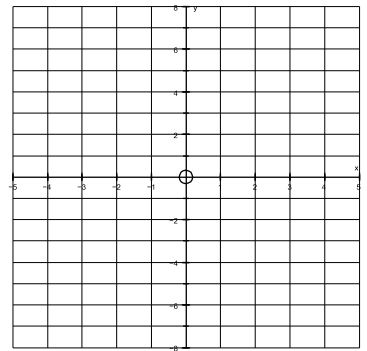
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15) $y = -1/2|x| + 1$



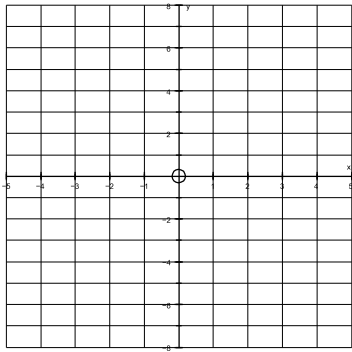
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16) $y = -\log_5(x-1)$



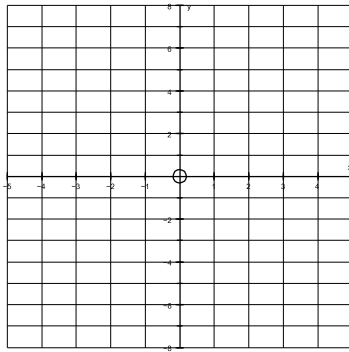
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17) $y = 5^{x+1} + 2$



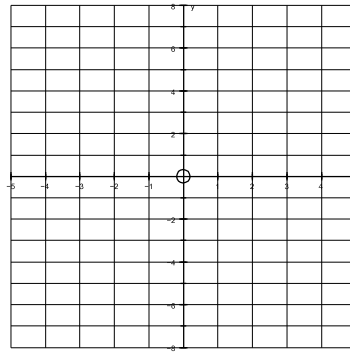
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18) $y = -6^{-x} + 1$



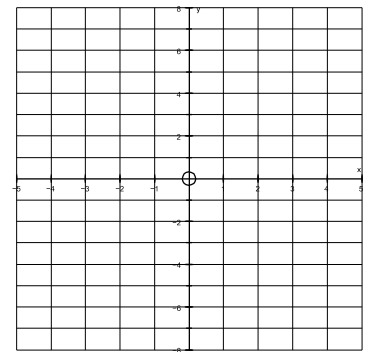
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19) $y = \frac{1}{2}x^{-1} - 3$



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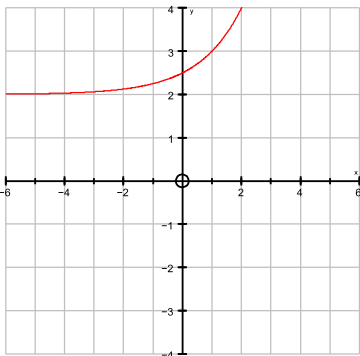
20) $y = \log(-x-4)$



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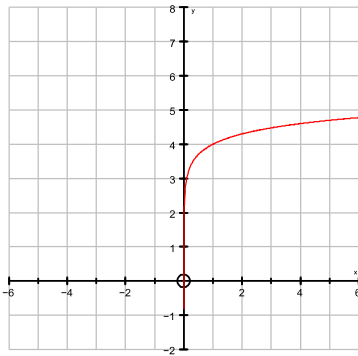
Given the graph of an equation, identify the parent equation, describe the transformations, and write the equation.

21)



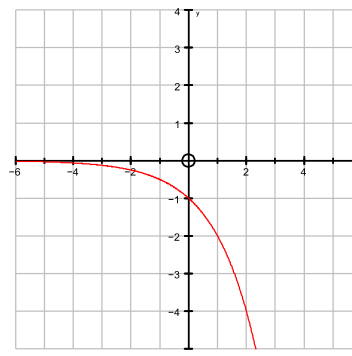
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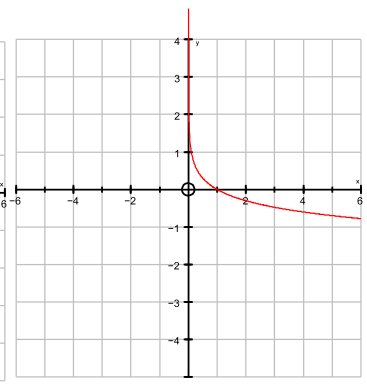
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23)



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24)



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