Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations ALPHA NO Graphing Calculator Hour\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A graph of a function  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -2 | -1 | 0 | 1 | 2 | | f(x) | -8 | -1 | 0 | 1 | 8 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations BETA NO Graphing Calculator Hour\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A graph of a function  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -2 | -1 | 0 | 1 | 2 | | f(x) | -8 | -1 | 0 | 1 | 8 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |
| A graph of a line graph  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -4 | -1 | 0 | 1 | 4 | | f(x) | und | und | 0 | 1 | 2 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

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| A graph of a line graph  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -4 | -1 | 0 | 1 | 4 | | f(x) | und | und | 0 | 1 | 2 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b+10  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations DELTA NO Graphing Calculator Hour\_\_\_\_\_\_

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A graph of a function  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -2 | -1 | 0 | 1 | 2 | | f(x) | -8 | -1 | 0 | 1 | 8 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations GAMMA NO Graphing Calculator Hour\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A graph of a function  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -2 | -1 | 0 | 1 | 2 | | f(x) | -8 | -1 | 0 | 1 | 8 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State point of inflection  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |
| A graph of a line graph  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -4 | -1 | 0 | 1 | 4 | | f(x) | und | und | 0 | 1 | 2 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

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| A graph of a line graph  Description automatically generated  This is   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | x | -4 | -1 | 0 | 1 | 4 | | f(x) | und | und | 0 | 1 | 2 | | Sketch a  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | | Sketch b  and complete the table below.     |  |  | | --- | --- | | State extreme point  ( , ) | State y intercept  ( , ) | | State any other point  ( , ) | State any other point  ( , ) | |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations ALPHA WITH Graphing Calculator Hour\_\_\_\_\_\_

* Write a cubic function that is a vertical reflection\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical stretch\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical compression\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 2, -5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -3, 4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -4, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 0, 6) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations BETA WITH Graphing Calculator Hour\_\_\_\_\_\_

* Write a cubic function that is a vertical reflection\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical stretch\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical compression\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -5, 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 7, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 8, -3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 0, -9) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a horizontal shift \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical reflection and a horizontal shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 10, -1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( -3, 5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 9, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 0, -8) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a horizontal shift \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical reflection and a horizontal shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 10, -1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( -3, 5) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 9, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 0, -8) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations DELTA WITH Graphing Calculator Hour\_\_\_\_\_\_

* Write a cubic function that is a vertical reflection\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical stretch\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical compression\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 4, -3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -8, 7) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 0, 11) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -13, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FA Function Transformations GAMMA WITH Graphing Calculator Hour\_\_\_\_\_\_

* Write a cubic function that is a vertical reflection\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical stretch\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that is a vertical compression\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 4, 17) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -9, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( -4, -15) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a cubic function that shifts its point of inflection to the point ( 0, 19) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a horizontal shift \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical reflection and a horizontal shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( -12, -4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 4, -23) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( -8, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 0, 17) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a horizontal shift \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that is a vertical reflection and a horizontal shift\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( -16, 10) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 30, -15) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 0, -14) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Write a square root function that shifts its extreme point to the point ( 16, 0) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_