HONORS PRECALCULUS NAME

MORE TRANSFORMATIONS TO THE GRAPHS OF TRIG FUNCTIONS

***NO CALCULATORS!***

**Describe the transformations for each equation:**

|  |  |  |
| --- | --- | --- |
| 1.  | 2.  | 3.  |

**Write an equation that describes each function below:**

|  |  |  |
| --- | --- | --- |
| 4. A cosine function with amplitude 5, period , and shift left  | 5. A cotangent function with period 8, shift right 1, reflected over the *x*-axis | 6. A secant function with a vertical stretch by a factor of 4, shifted up 2, and with period π |

**Graph:**

|  |  |
| --- | --- |
| 7.  | 8.  |
| 9.  | 10.  |

|  |  |
| --- | --- |
| 11.  | 12.  |
| 13.  | 14.  |

Write an equation for each graph:

|  |  |
| --- | --- |
| 15. | 16. |
| 17.  | 18. |