**Precalculus Trigonometric Function Chart**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Function | $$y=2sin\left(x+3π\right)$$ | $$y=3cos\frac{x}{2}$$ | $$y=3cos\frac{2πx}{3}$$ | $$y=tanπx-2$$ | $$y=sin^{-1}x$$ | $$y=\frac{-1}{2}cot\left(-x\right)$$ | $$y=2sec\frac{x}{2}$$ | $$y=arctanx+2$$ | $$y=3arctan2x$$ |
| Parent Function |  |  |  |  |  |  |  |  |  |
| Amplitude |  |  |  |  |  |  |  |  |  |
| Period |  |  |  |  |  |  |  |  |  |
| Asymptotes |  |  |  |  |  |  |  |  |  |
| Vertical Shift |  |  |  |  |  |  |  |  |  |
| Phase Shift (Horizontal Shift) |  |  |  |  |  |  |  |  |  |
| Domain |  |  |  |  |  |  |  |  |  |
| Range |  |  |  |  |  |  |  |  |  |

 Fill out the chart for each of the functions listed. Graph these functions on a separate sheet of paper. Assume $k\in Z$ (k is any integer). Use a graphing utility to help confirm your drawing.

