

Graphs of Csc, Sec, Cot - Period and Amplitude changes

Graph each function. Label important features.

- | | | |
|--|---|--|
| 1. $y = 4\csc x$ | 2. $y = 2\sec 2x$ | 3. $y = 30 \sec \left(\frac{1}{2}x\right)$ |
| 4. $y = 5 \csc (\pi x)$ | 5. $y = -12 \csc \left(\frac{1}{4}x\right)$ | 6. $y = - \cot \left(\frac{1}{2}x\right)$ |
| 7. $y = \left(\frac{1}{3}\right) \cot x$ | 8. $y = 2 \cot (2x)$ | 9. $y = \cot \left(\frac{1}{4}x\right)$ |

(From WS 20)

Graphs of Csc, Sec, Cot – Vertical Displacement

Graph each function. Label important features.

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|---|---|---|
| 1. $y = \sec x + 1$ | 2. $y = 2 \sec \left(\frac{1}{2}x\right) - 1$ | 3. $y = - \sec (2x) - 2$ |
| 4. $y = \csc \left(\frac{1}{2}x\right) + 1$ | 5. $y = - 2 \csc (2x) + 2$ | 6. $y = \csc \left(\frac{\pi}{2}x\right) - 1$ |
| 7. $y = \cot x - 2$ | 8. $y = - \cot (2x) - 1$ | 9. $y = \cot \left(\frac{1}{4}x\right) - 1$ |

(From WS 21)