

Name: _____ No. _____ Per: _____
 Serafino · Precalculus

Date: _____
 M T W R F

3A2

Graphing Tangent & Cotangent (ABD)

Classwork / Homework: Graphing tangent and cotangent functions with transformations

Tangent Parent Function

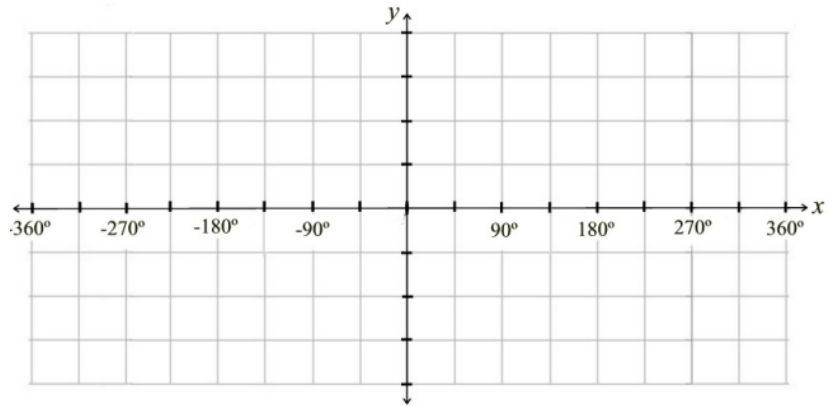
$$f(x) = \tan(x)$$

Domain:

Range:

Natural Period:

x-intercepts:



Cotangent Parent Function

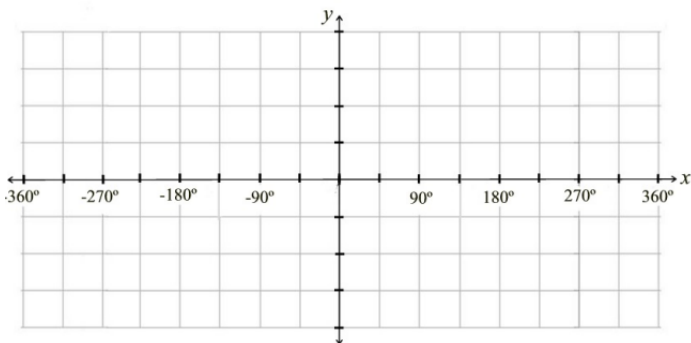
$$f(x) = \cot(x)$$

Domain:

Range:

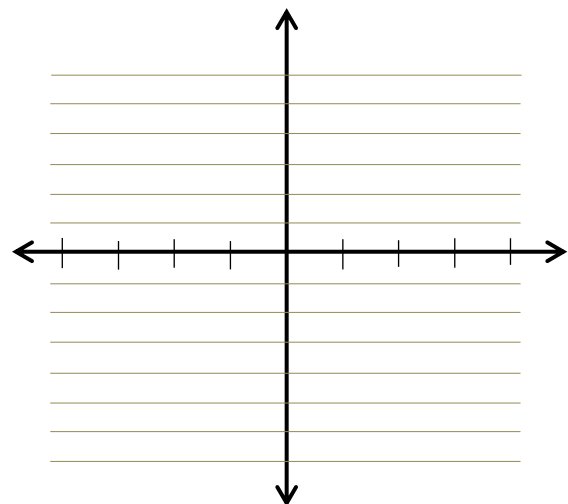
Natural Period:

x-intercepts:



1. $y = 2\tan(x) + 3$

SA:		Freq.	
D		R	
Per		Inc	



2. $y = -\tan(x) + 3$

SA:		Freq.	
D		R	
Per		Inc	

3. $y = 2 \cot(x)$

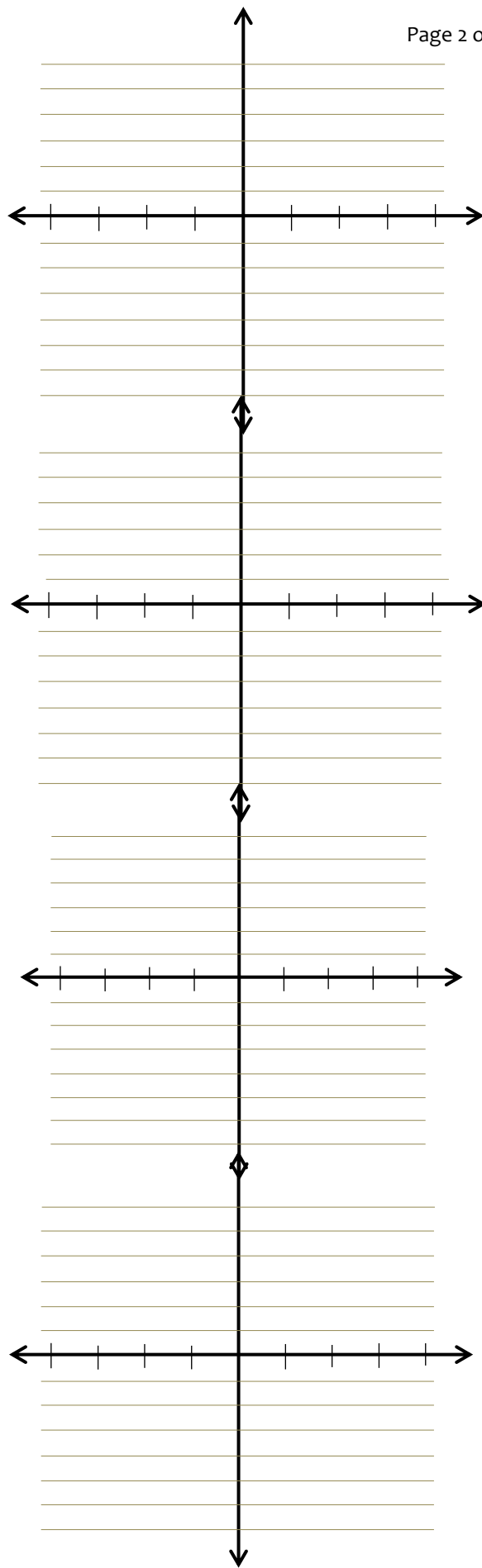
SA:		Freq.	
D		R	
Per		Inc	

4. $y = 2 \tan(3x) - 4$

SA:		Freq.	
D		R	
Per		Inc	

5. $y = -\cot\left(\frac{1}{2}x\right) + 4$

SA:		Freq.	
D		R	
Per		Inc	



6. $y = 3 \tan(3x) + 1$

SA:		Freq.	
D		R	
Per		Inc	

7. $y = \frac{1}{2} \cot\left(\frac{x}{2}\right) + 3$

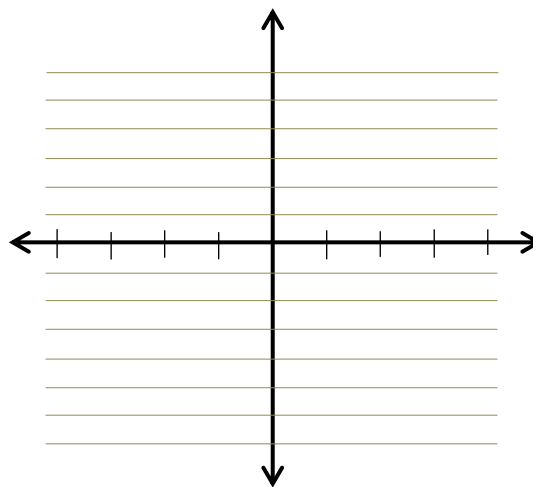
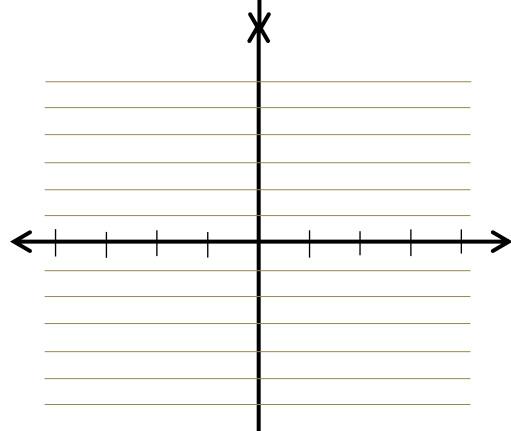
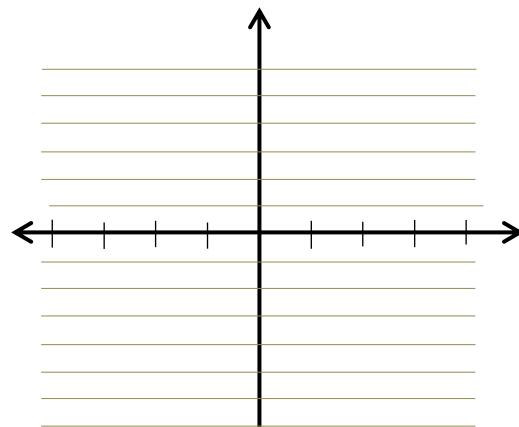
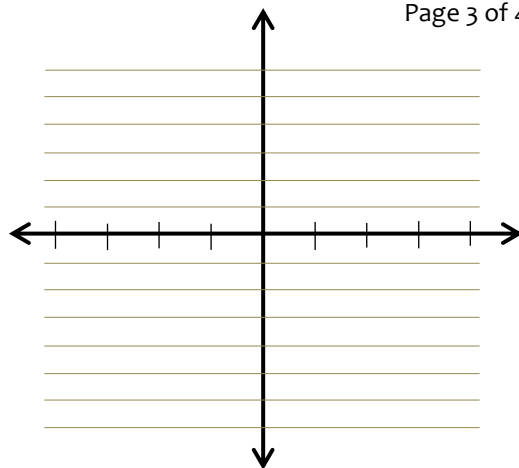
SA:		Freq.	
D		R	
Per		Inc	

8. $y = -4 \tan\left(\frac{2}{3}x\right) - 2$

SA:		Freq.	
D		R	
Per		Inc	

9. $y = -\cot(5x) + 4$

SA:		Freq.	
D		R	
Per		Inc	



10. $y = 2 + \cot\left(\frac{9}{2}x\right)$

SA:		Freq.	
D		R	
Per		Inc	

11. $y = -\frac{5}{2}\cot(20x)$

SA:		Freq.	
D		R	
Per		Inc	

12. $y = \cot(10x) + 4$

SA:		Freq.	
D		R	
Per		Inc	

13. $y = 4\tan(15x) - 2$

SA:		Freq.	
D		R	
Per		Inc	

