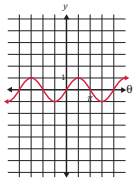
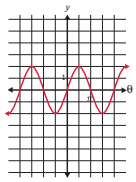
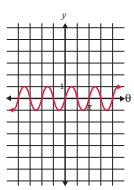
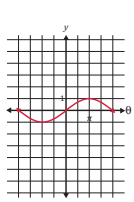
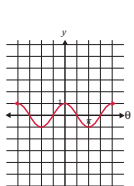
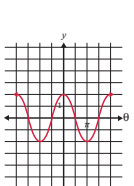
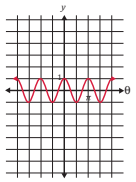
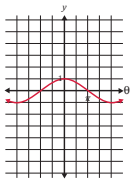
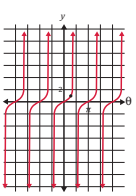
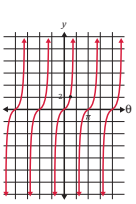
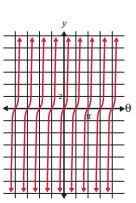
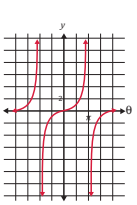
The Algebra Game: Trig Functions Matching Card Sets

Deck A

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = \sin\theta$ equation	1 amplitude	2π period	coordinate pairs θ | y −360° | 0 −270° | 1 −180° | 0 −90° | −1 0° | 0 90° | 1 180° | 0 270° | −1 360° | 0
	$y = 2\sin\theta$ equation	2 amplitude	2π period	coordinate pairs θ | y −360° | 0 −270° | 2 −180° | 0 −90° | −2 0° | 0 90° | 2 180° | 0 270° | −2 360° | 0
	$y = \sin 2\theta$ equation	1 amplitude	π period	coordinate pairs θ | y −360° | 0 −270° | 0 −180° | 0 −90° | 0 0° | 0 90° | 0 180° | 0 270° | 0 360° | 0
	$y = \sin\frac{1}{2}\theta$ equation	1 amplitude	4π period	coordinate pairs θ | y −360° | 0 −270° | −0.7071 −180° | −1 −90° | −0.7071 0° | 0 90° | 0.7071 180° | 1 270° | 0.7071 360° | 0
	$y = \cos\theta$ equation	1 amplitude	2π period	coordinate pairs θ | y −360° | 1 −270° | 0 −180° | −1 −90° | 0 0° | 1 90° | 0 180° | −1 270° | 0 360° | 1
	$y = 2\cos\theta$ equation	2 amplitude	2π period	coordinate pairs θ | y −360° | 2 −270° | 0 −180° | −2 −90° | 0 0° | 2 90° | 0 180° | −2 270° | 0 360° | 2

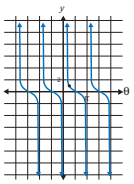
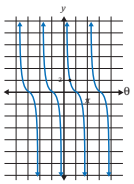
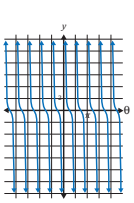
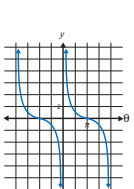
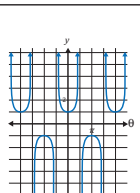
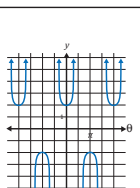
The Algebra Game: Trig Functions Matching Card Sets

Deck A (continued)

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = \cos 2\theta$ equation	1 amplitude	π period	coordinate pairs θ | y −360° | 1 −270° | −1 −180° | 1 −90° | −1 0° | 1 90° | −1 180° | 1 270° | −1 360° | 1
	$y = \cos \frac{1}{2}\theta$ equation	1 amplitude	4π period	coordinate pairs θ | y −360° | −1 −270° | −0.7071 −180° | 0 −90° | 0.7071 0° | 1 90° | 0.7071 180° | 0 270° | −0.7071 360° | −1
	$y = \tan \theta$ equation	$\theta = \frac{\pi}{2}$ asymptote	π period	coordinate pairs θ | y −360° | 0 −270° | undefined −180° | 0 −90° | undefined 0° | 0 90° | undefined 180° | 0 270° | undefined 360° | 0
	$y = 2 \tan \theta$ equation	$\theta = \frac{\pi}{2}$ asymptote	π period	coordinate pairs θ | y −360° | 0 −270° | undefined −180° | 0 −90° | undefined 0° | 0 90° | undefined 180° | 0 270° | undefined 360° | 0
	$y = \tan 2\theta$ equation	$\theta = \frac{\pi}{4}$ asymptote	$\frac{1}{2}\pi$ period	coordinate pairs θ | y −360° | 0 −270° | 0 −180° | 0 −90° | 0 0° | 0 90° | 0 180° | 0 270° | 0 360° | 0
	$y = \tan \frac{1}{2}\theta$ equation	$\theta = \pi$ asymptote	2π period	coordinate pairs θ | y −360° | 0 −270° | 1 −180° | undefined −90° | −1 0° | 0 90° | 1 180° | undefined 270° | −1 360° | 0

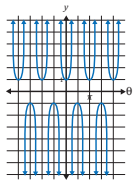
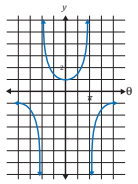
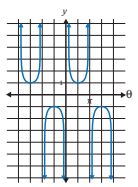
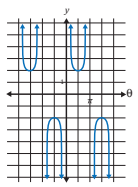
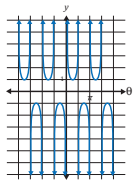
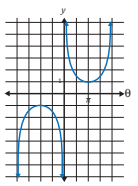
The Algebra Game: Trig Functions Matching Card Sets

Deck B

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = \cot\theta$	$\theta = \pi$	π	coordinate pairs θ | y −360° | undefined −270° | 0 −180° | undefined −90° | 0 0° | undefined 90° | 0 180° | undefined 270° | 0 360° | undefined
	$y = 2\cot\theta$	$\theta = \pi$	π	coordinate pairs θ | y −360° | undefined −270° | 0 −180° | undefined −90° | 0 0° | undefined 90° | 0 180° | undefined 270° | 0 360° | undefined
	$y = \cot 2\theta$	$\theta = \frac{\pi}{2}$	$\frac{1}{2}\pi$	coordinate pairs θ | y −360° | undefined −270° | undefined −180° | undefined −90° | undefined 0° | undefined 90° | undefined 180° | undefined 270° | undefined 360° | undefined
	$y = \cot\frac{1}{2}\theta$	$\theta = 2\pi$	2π	coordinate pairs θ | y −360° | undefined −270° | 1 −180° | 0 −90° | −1 0° | undefined 90° | 1 180° | 0 270° | −1 360° | undefined
	$y = \sec\theta$	$\theta = \frac{\pi}{2}$	2π	coordinate pairs θ | y −360° | 1 −270° | undefined −180° | −1 −90° | undefined 0° | 1 90° | undefined 180° | −1 270° | undefined 360° | 1
	$y = 2\sec\theta$	$\theta = \frac{\pi}{2}$	2π	coordinate pairs θ | y −360° | 2 −270° | undefined −180° | −2 −90° | undefined 0° | 2 90° | undefined 180° | −2 270° | undefined 360° | 2

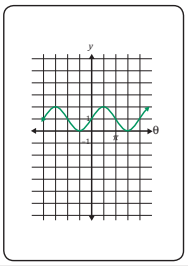
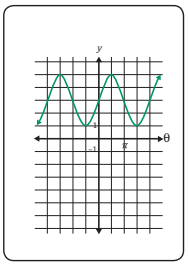
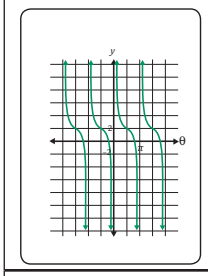
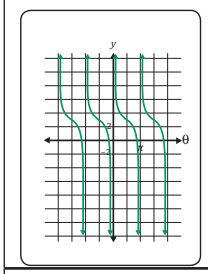
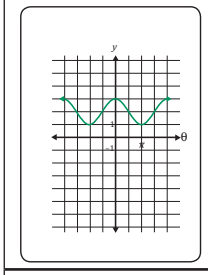
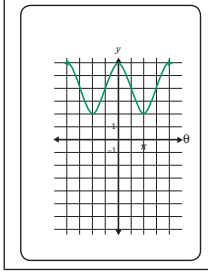
The Algebra Game: Trig Functions Matching Card Sets

Deck B (continued)

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = \sec 2\theta$ equation	$\theta = \frac{\pi}{4}$ asymptote	π period	coordinate pairs θ | y −360° | 1 −270° | −1 −180° | 1 −90° | −1 0° | 1 90° | −1 180° | 1 270° | −1 360° | 1
	$y = \sec\frac{1}{2}\theta$ equation	$\theta = \pi$ asymptote	4π period	coordinate pairs θ | y −360° | −1 −270° | −1.414 −180° | undefined −90° | 1.414 0° | 1 90° | 1.414 180° | undefined 270° | −1.414 360° | −1
	$y = \csc\theta$ equation	$\theta = \pi$ asymptote	2π period	coordinate pairs θ | y −360° | undefined −270° | 1 −180° | undefined −90° | −1 0° | undefined 90° | 1 180° | undefined 270° | −1 360° | undefined
	$y = 2\csc\theta$ equation	$\theta = \pi$ asymptote	2π period	coordinate pairs θ | y −360° | undefined −270° | 2 −180° | undefined −90° | −2 0° | undefined 90° | 2 180° | undefined 270° | −2 360° | undefined
	$y = \csc 2\theta$ equation	$\theta = \frac{\pi}{2}$ asymptote	π period	coordinate pairs θ | y −360° | undefined −270° | undefined −180° | undefined −90° | undefined 0° | undefined 90° | undefined 180° | undefined 270° | undefined 360° | undefined
	$y = \csc\frac{1}{2}\theta$ equation	$\theta = 2\pi$ asymptote	4π period	coordinate pairs θ | y −360° | undefined −270° | −1.414 −180° | −1 −90° | −1.414 0° | undefined 90° | 1.414 180° | 1 270° | 1.414 360° | undefined

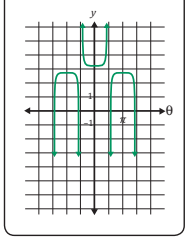
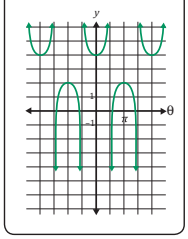
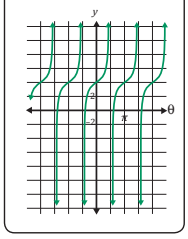
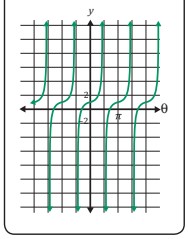
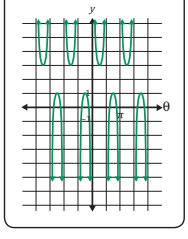
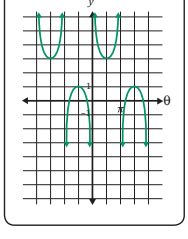
The Algebra Game: Trig Functions Matching Card Sets

Deck C

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = 1 + \sin\theta$ equation	1 amplitude	2π period	coordinate pairs θ | y −360° | 1 −270° | 2 −180° | 1 −90° | 0 0° | 1 90° | 2 180° | 1 270° | 0 360° | 1
	$y = 3 + 2\sin\theta$ equation	2 amplitude	2π period	coordinate pairs θ | y −360° | 3 −270° | 5 −180° | 3 −90° | 1 0° | 3 90° | 5 180° | 3 270° | 1 360° | 3
	$y = 2 + \cot\theta$ equation	$\theta = \pi$ asymptote	π period	coordinate pairs θ | y −360° | undefined −270° | 2 −180° | undefined −90° | 2 0° | undefined 90° | 2 180° | undefined 270° | 2 360° | undefined
	$y = 3 + \cot\theta$ equation	$\theta = \pi$ asymptote	π period	coordinate pairs θ | y −360° | undefined −270° | 3 −180° | undefined −90° | 3 0° | undefined 90° | 3 180° | undefined 270° | 3 360° | undefined
	$y = 2 + \cos\theta$ equation	1 amplitude	2π period	coordinate pairs θ | y −360° | 3 −270° | 2 −180° | 1 −90° | 2 0° | 3 90° | 2 180° | 1 270° | 2 360° | 3
	$y = 4 + 2\cos\theta$ equation	2 amplitude	2π period	coordinate pairs θ | y −360° | 6 −270° | 4 −180° | 2 −90° | 4 0° | 6 90° | 4 180° | 2 270° | 4 360° | 6

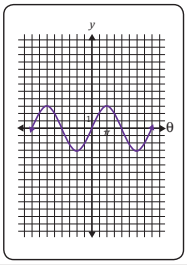
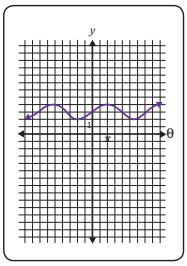
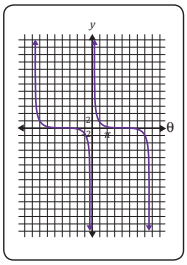
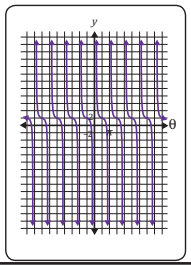
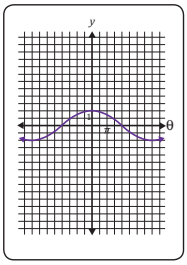
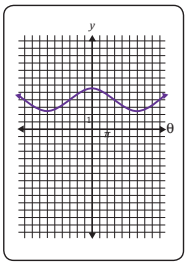
The Algebra Game: Trig Functions Matching Card Sets

Deck C (continued)

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = 3 + \frac{1}{4}\sec\theta$	$\theta = \frac{\pi}{2}$	2π	coordinate pairs θ | y −360° | 3.25 −270° | undefined −180° | 2.75 −90° | undefined 0° | 3.25 90° | undefined 180° | 2.75 270° | undefined 360° | 3.25
	$y = 3 + \sec\theta$	$\theta = \frac{\pi}{2}$	2π	coordinate pairs θ | y −360° | 4 −270° | undefined −180° | 2 −90° | undefined 0° | 4 90° | undefined 180° | 2 270° | undefined 360° | 4
	$y = 4 + \tan\theta$	$\theta = \frac{\pi}{2}$	π	coordinate pairs θ | y −360° | 4 −270° | undefined −180° | 4 −90° | undefined 0° | 4 90° | undefined 180° | 4 270° | undefined 360° | 4
	$y = 1 + \frac{1}{2}\tan\theta$	$\theta = \frac{\pi}{2}$	π	coordinate pairs θ | y −360° | 1 −270° | undefined −180° | 1 −90° | undefined 0° | 1 90° | undefined 180° | 1 270° | undefined 360° | 1
	$y = 2 + \csc 2\theta$	$\theta = \frac{\pi}{2}$	π	coordinate pairs θ | y −360° | undefined −270° | undefined −180° | undefined −90° | undefined 0° | undefined 90° | undefined 180° | undefined 270° | undefined 360° | undefined
	$y = 2 + \csc\theta$	$\theta = \pi$	2π	coordinate pairs θ | y −360° | undefined −270° | 3 −180° | undefined −90° | 1 0° | undefined 90° | 3 180° | undefined 270° | 1 360° | undefined

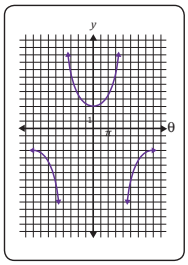
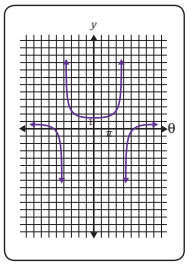
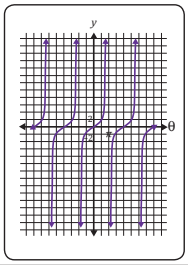
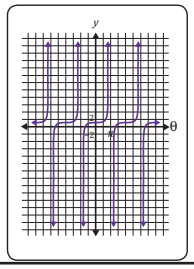
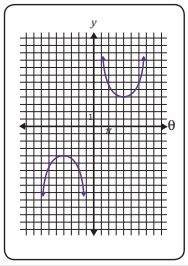
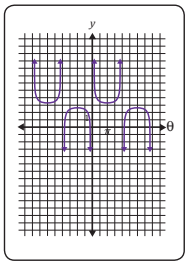
The Algebra Game: Trig Functions Matching Card Sets

Deck D

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = 3 \sin \frac{1}{2}\theta$ equation	3 amplitude	4π period	coordinate pairs θ | y −360° | 0 −270° | −2.121 −180° | −3 −90° | −2.121 0° | 0 90° | 2.121 180° | 3 270° | 2.121 360° | 0
	$y = 3 + \sin \frac{1}{2}\theta$ equation	1 amplitude	4π period	coordinate pairs θ | y −360° | 3 −270° | 2.293 −180° | 2 −90° | 2.293 0° | 3 90° | 3.707 180° | 4 270° | 3.707 360° | 3
	$y = \frac{1}{2} \cot \frac{1}{4}\theta$ equation	$\theta = 4\pi$ asymptote	4π period	coordinate pairs θ | y −360° | 0 −270° | −0.207 −180° | −0.5 −90° | −1.207 0° | undefined 90° | 1.207 180° | 0.5 270° | 0.207 360° | 0
	$y = 2 + \frac{1}{3} \cot \theta$ equation	$\theta = \pi$ asymptote	π period	coordinate pairs θ | y −360° | undefined −270° | 2 −180° | undefined −90° | 2 0° | undefined 90° | 2 180° | undefined 270° | 2 360° | undefined
	$y = 2 \cos \frac{1}{4}\theta$ equation	2 amplitude	8π period	coordinate pairs θ | y −360° | 0 −270° | 0.765 −180° | 1.414 −90° | 1.848 0° | 2 90° | 1.848 180° | 1.414 270° | 0.765 360° | 0
	$y = 4 + \frac{3}{2} \cos \frac{1}{3}\theta$ equation	$\frac{3}{2}$ amplitude	6π period	coordinate pairs θ | y −360° | 3.25 −270° | 4 −180° | 4.75 −90° | 5.299 0° | 5.5 90° | 5.299 180° | 4.75 270° | 4 360° | 3.25

The Algebra Game: Trig Functions Matching Card Sets

Deck D (continued)

Graph	Equation	Amplitude/ Asymptote	Period	Coordinate Pair
	$y = 3 \sec \frac{1}{4}\theta$ equation	$\theta = 2\pi$ asymptote	8π period	coordinate pairs θ | y −360° | undefined −270° | 7.839 −180° | 4.243 −90° | 3.247 0° | 3 90° | 3.247 180° | 4.243 270° | 7.839 360° | undefined
	$y = 1 + \frac{1}{2}\sec \frac{1}{4}\theta$ equation	$\theta = 2\pi$ asymptote	8π period	coordinate pairs θ | y −360° | undefined −270° | 2.307 −180° | 1.707 −90° | 1.541 0° | 1.5 90° | 1.541 180° | 1.707 270° | 2.307 360° | undefined
	$y = 2 \tan \frac{1}{2}\theta$ equation	$\theta = \pi$ asymptote	2π period	coordinate pairs θ | y −360° | 0 −270° | 2 −180° | undefined −90° | −2 0° | 0 90° | 2 180° | undefined 270° | −2 360° | 0
	$y = 1 + \frac{1}{2}\tan \frac{1}{2}\theta$ equation	$\theta = \pi$ asymptote	2π period	coordinate pairs θ | y −360° | 1 −270° | 1.5 −180° | undefined −90° | 0.5 0° | 1 90° | 1.5 180° | undefined 270° | 0.5 360° | 1
	$y = 4 \csc \frac{1}{4}\theta$ equation	$\theta = 4\pi$ asymptote	8π period	coordinate pairs θ | y −360° | −4 −270° | −4.330 −180° | −5.657 −90° | −10.453 0° | undefined 90° | 10.453 180° | 5.657 270° | 4.330 360° | 4
	$y = 3 + \frac{1}{4}\csc \frac{1}{2}\theta$ equation	$\theta = 2\pi$ asymptote	4π period	coordinate pairs θ | y −360° | undefined −270° | 2.646 −180° | 2.75 −90° | 2.646 0° | undefined 90° | 3.354 180° | 3.25 270° | 3.354 360° | undefined