

tangent transformations 1

	A	B	C	D
=				
1	a		6	
2	b	$4 \cdot \pi$		
A1	a			

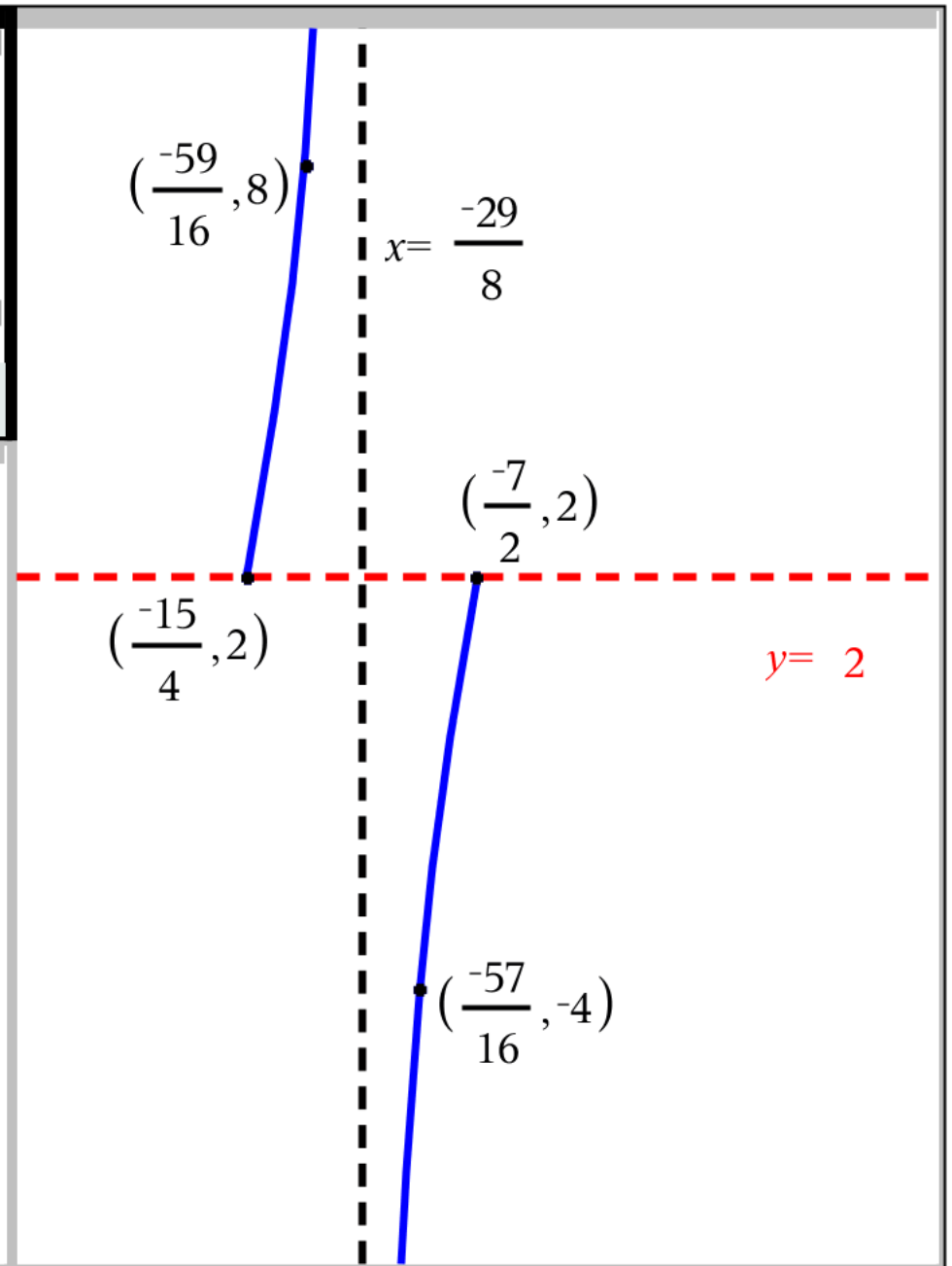
$$y = 6 \tan\left(4 \cdot \pi \left(x + \frac{15}{4}\right)\right) + 2$$

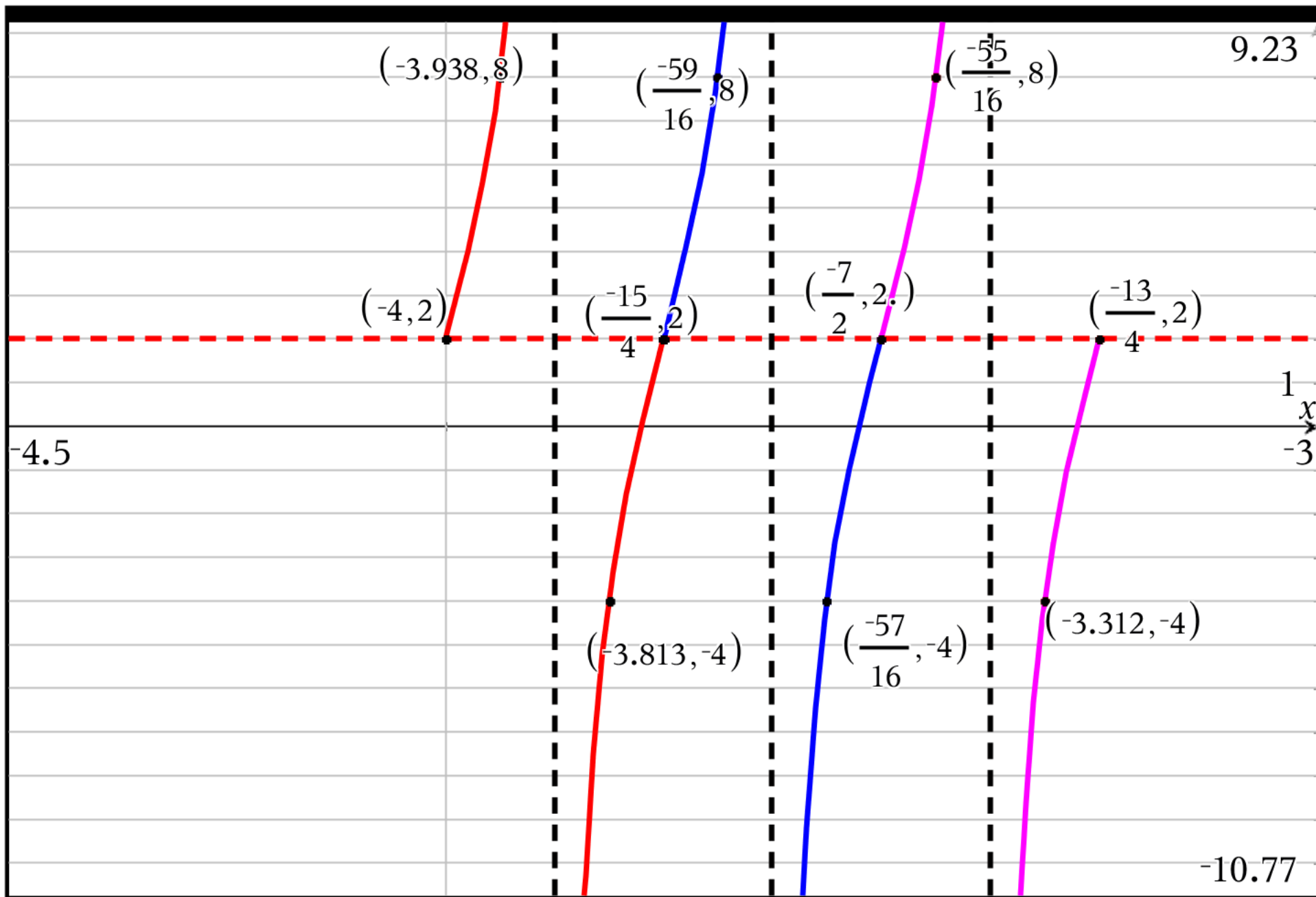
$$y = 6 \tan(4 \cdot \pi x + 15 \cdot \pi) + 2$$

Period  $\left[\frac{-15}{4}, \frac{-7}{2}\right)$  "Amplitude" 6

Equation of Midline  $y = 2$

Equation of Asymptote  $x = \frac{-29}{8}$





tangent transformations 2

	A	B	C	D
=				
1	a		7/4	
2	b		3/5	
3	c	-4*π/5		

A1 a

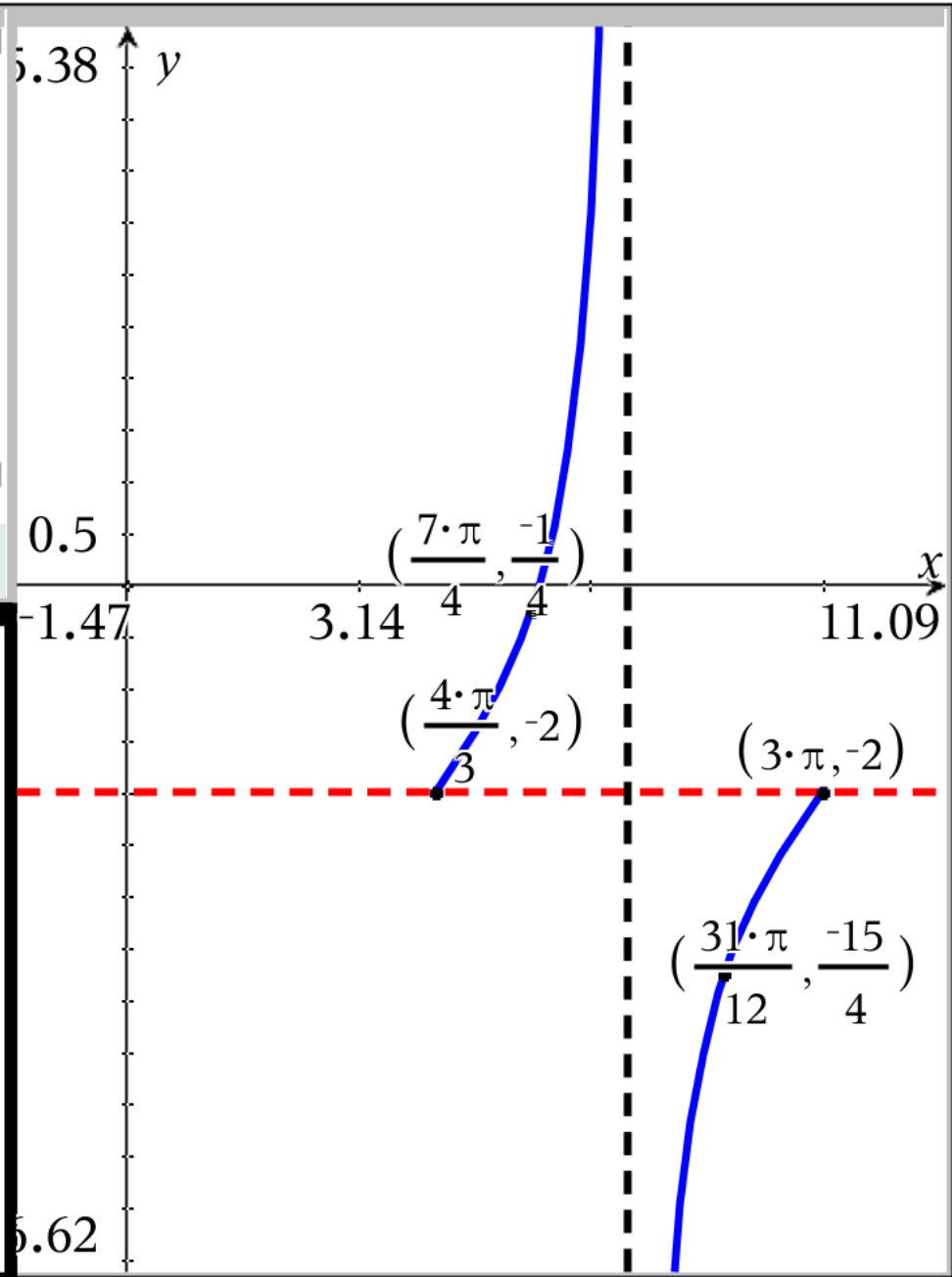
$$y = \frac{7}{4} \tan\left(\frac{3}{5}\left(x - \frac{4 \cdot \pi}{3}\right)\right) - 2$$

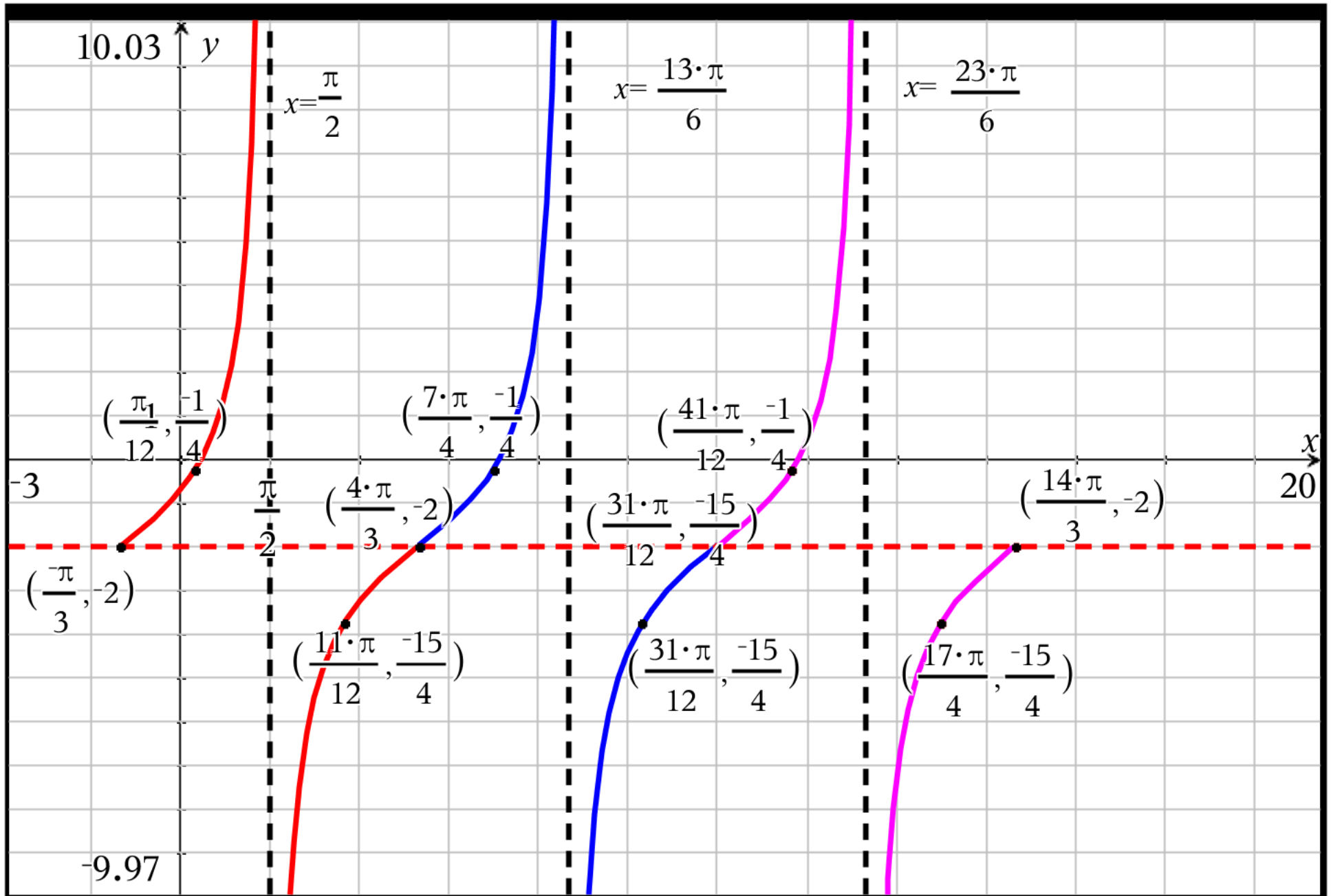
$$y = \frac{7}{4} \tan\left(\frac{3}{5}x - \frac{4 \cdot \pi}{5}\right) - 2$$

Period  $\left[\frac{4 \cdot \pi}{3}, 3 \cdot \pi\right)$  Amplitude  $\frac{7}{4}$

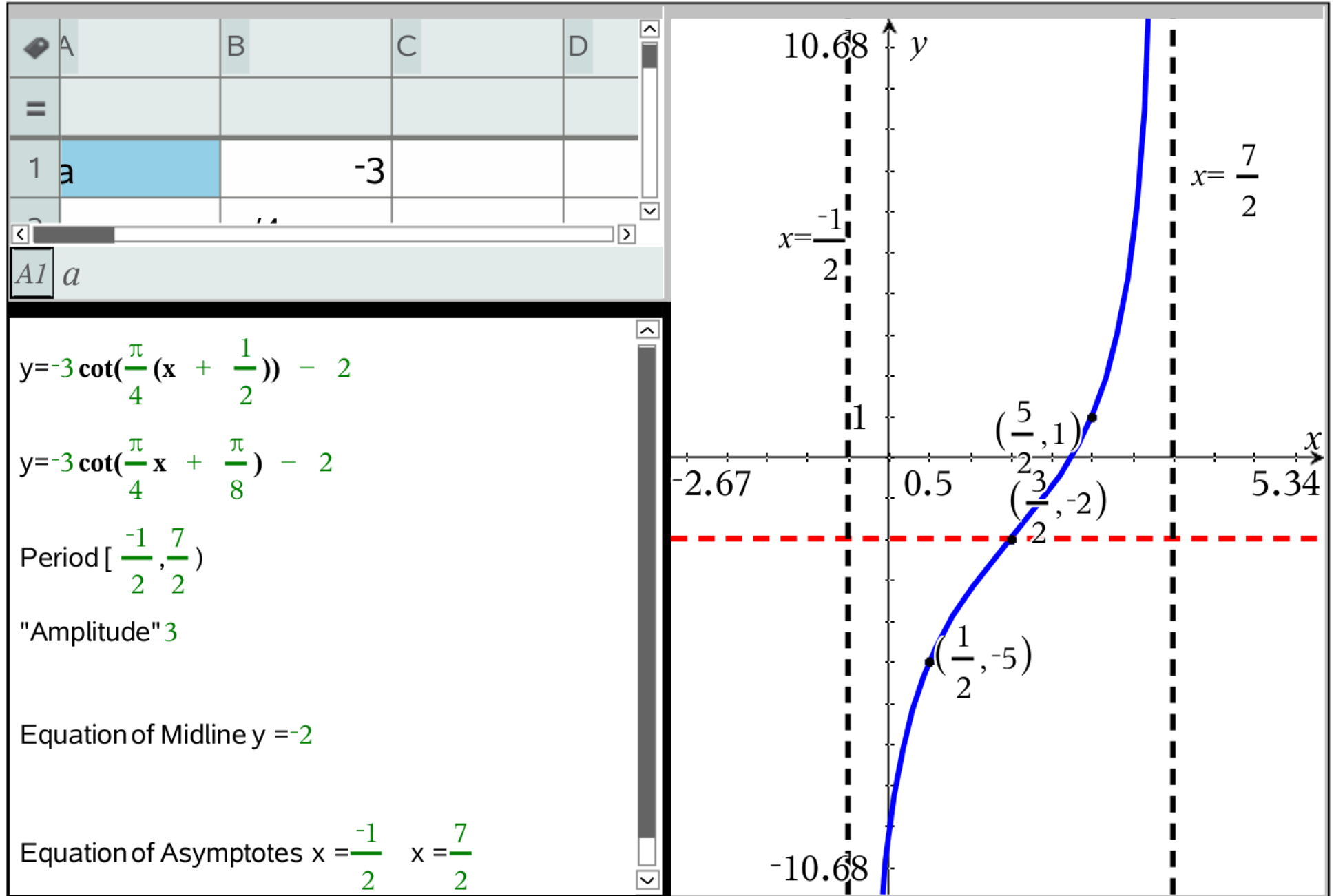
Equation of Midline  $y = -2$

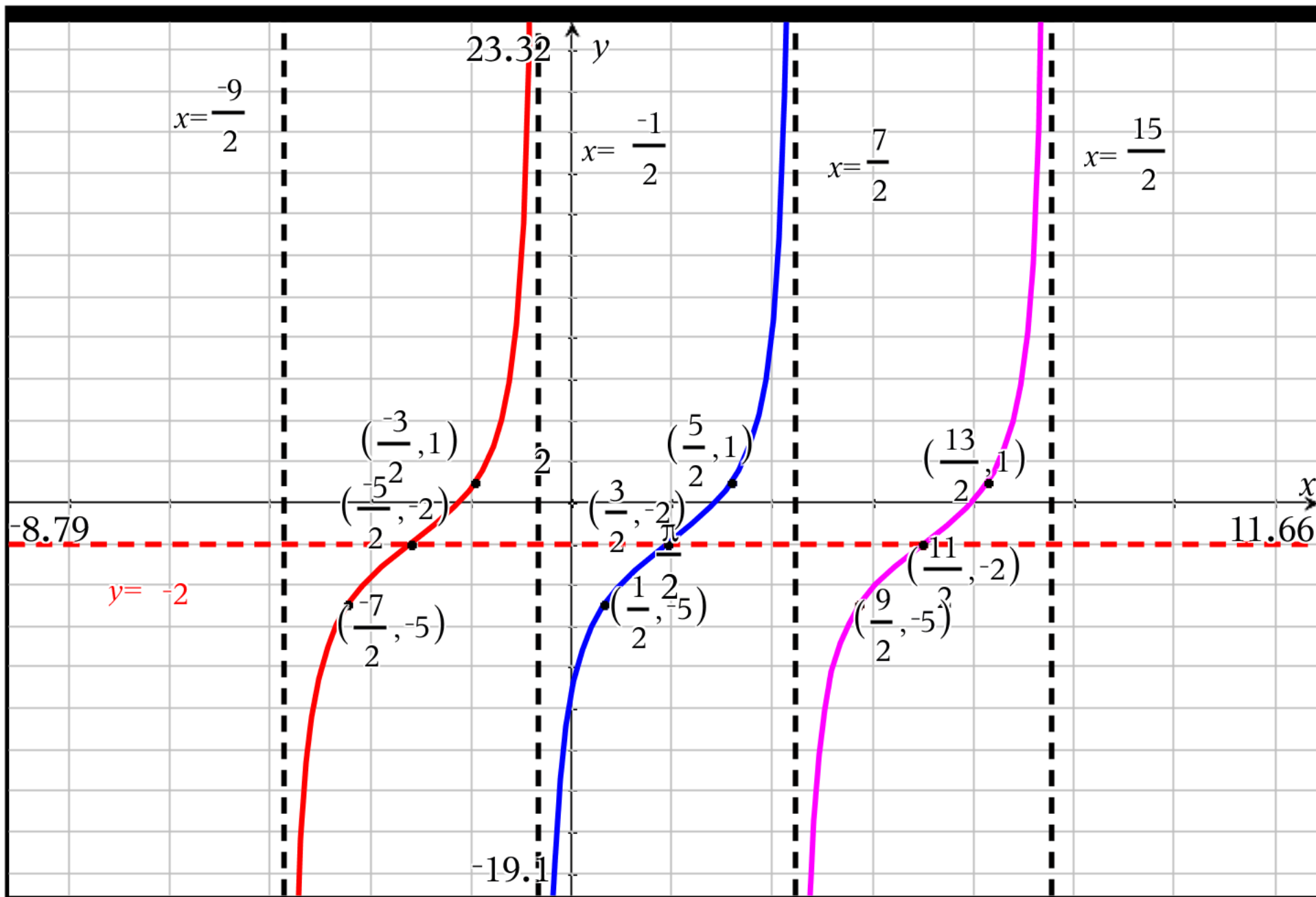
Equation of Asymptote  $x = \frac{13 \cdot \pi}{6}$



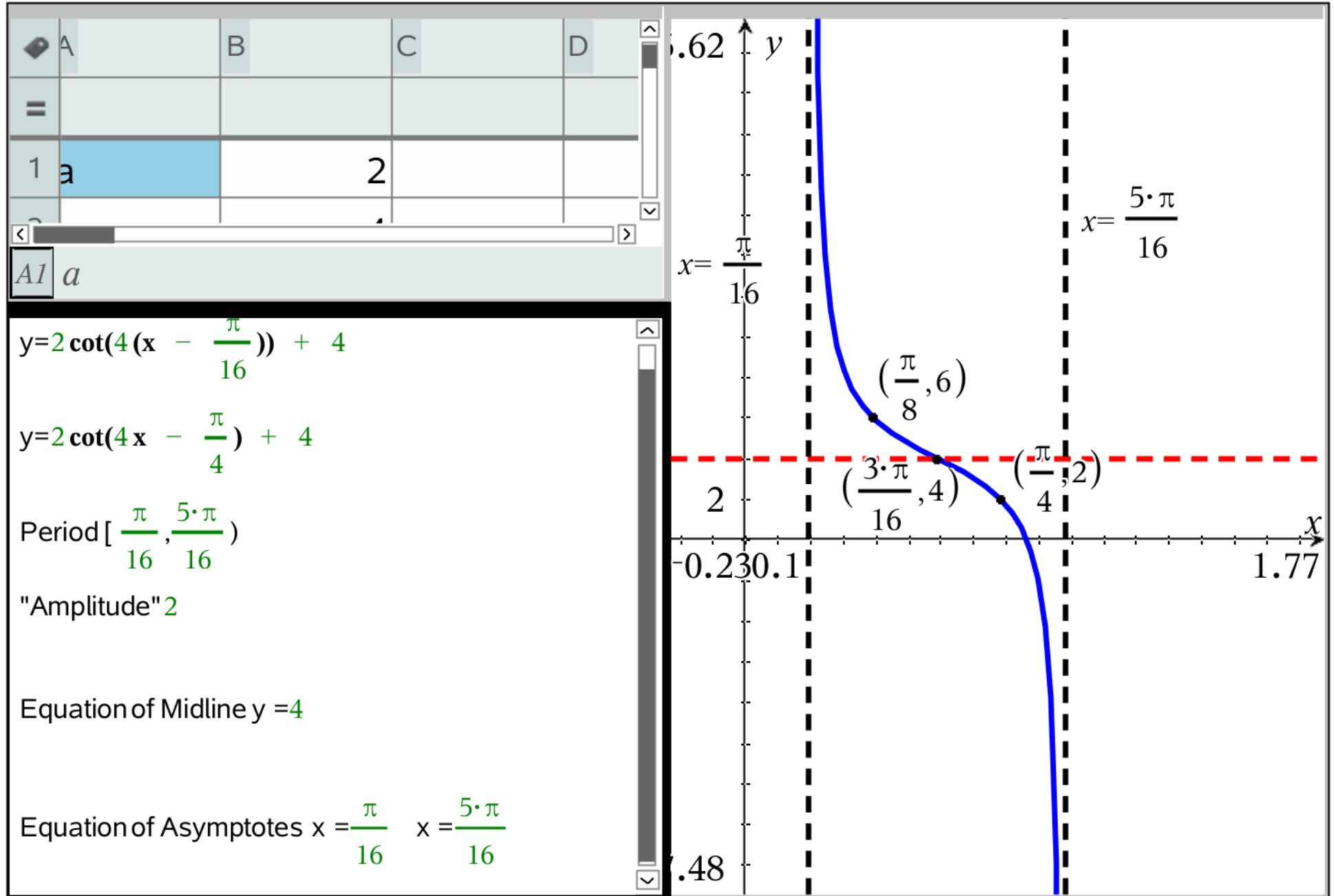


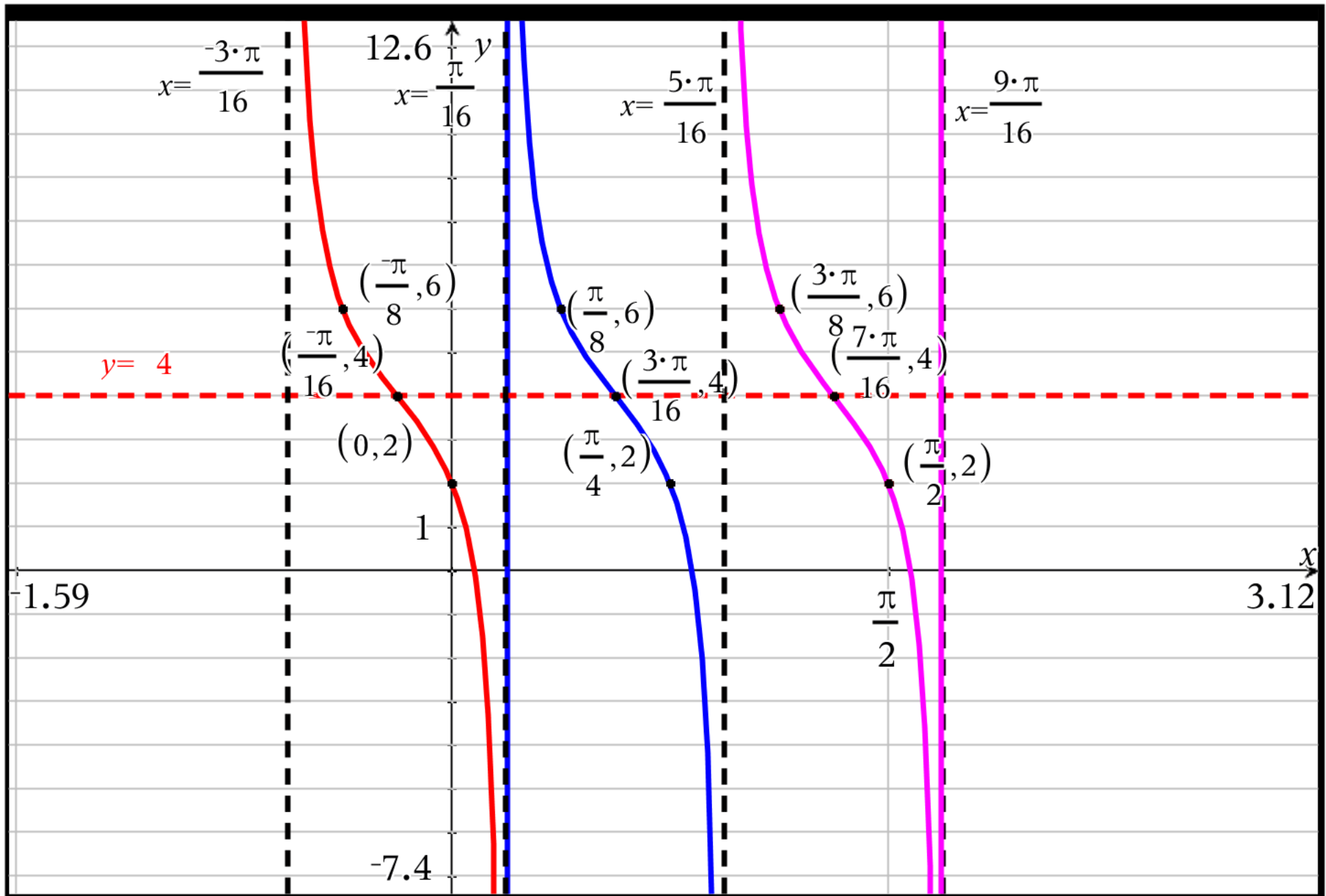
cotangent transformations 1





cotangent transformations 2







tangent transformations 3

	A	B	C	D
=				
1	a	13/5		
2	b	$-\pi/6$		
3	c	$-4*\pi/3$		

A1 a

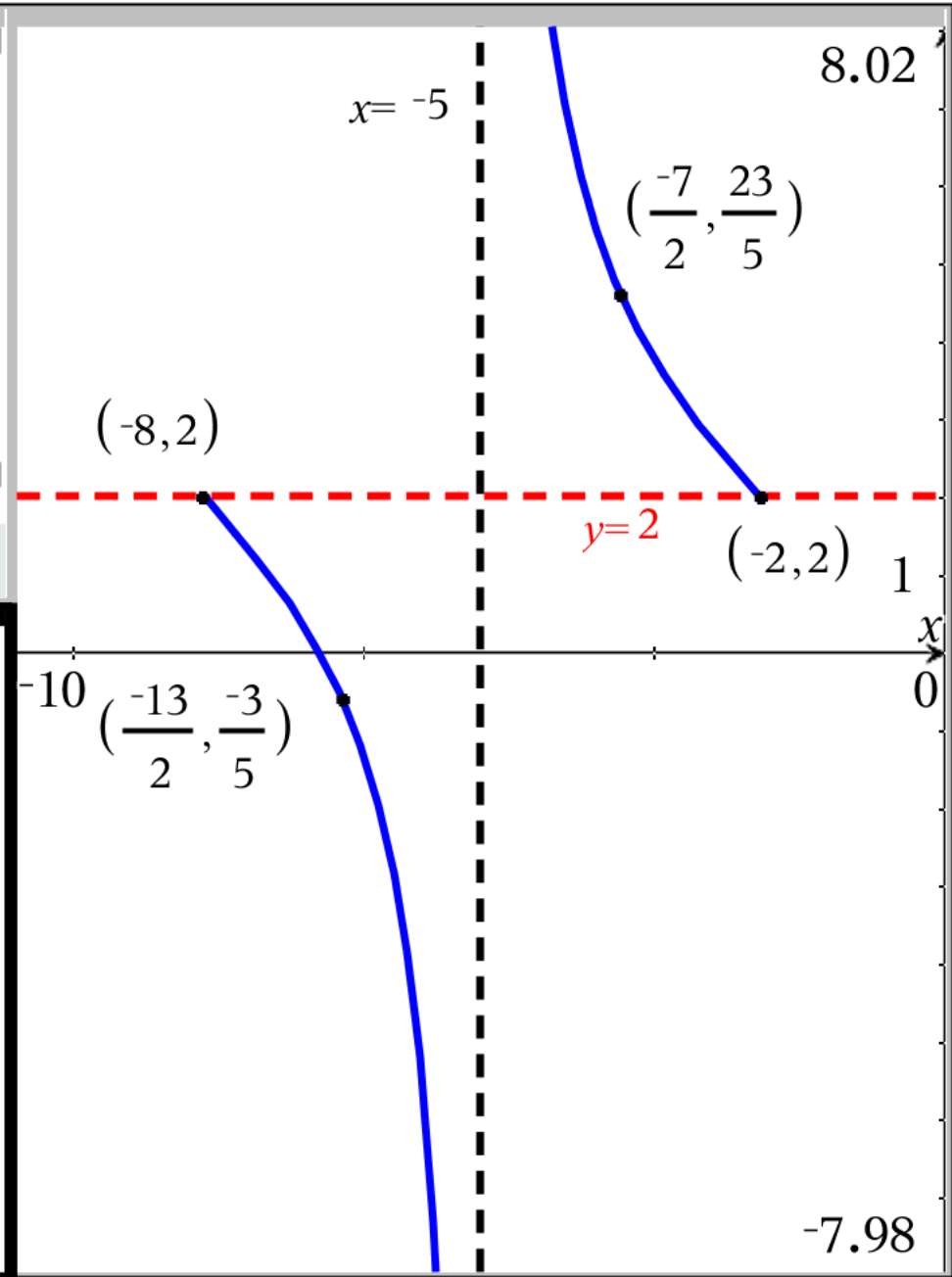
$$y = \frac{13}{5} \tan\left(\frac{-\pi}{6}(x + 8)\right) + 2$$

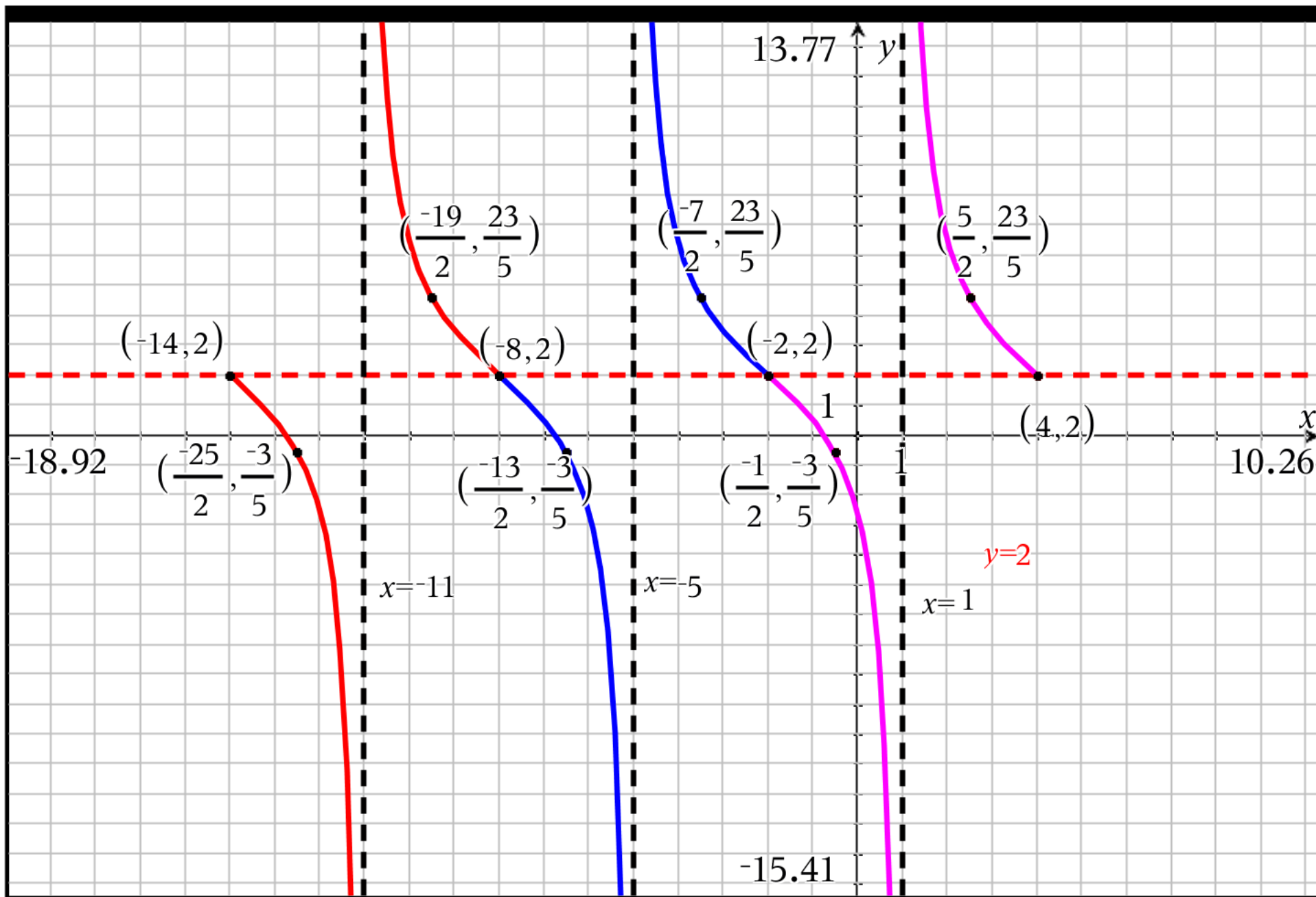
$$y = \frac{13}{5} \tan\left(\frac{-\pi}{6}x - \frac{4\pi}{3}\right) + 2$$

Period  $[-8, -2)$  Amplitude  $\frac{13}{5}$

Equation of Midline  $y = 2$

Equation of Asymptote  $x = -5$



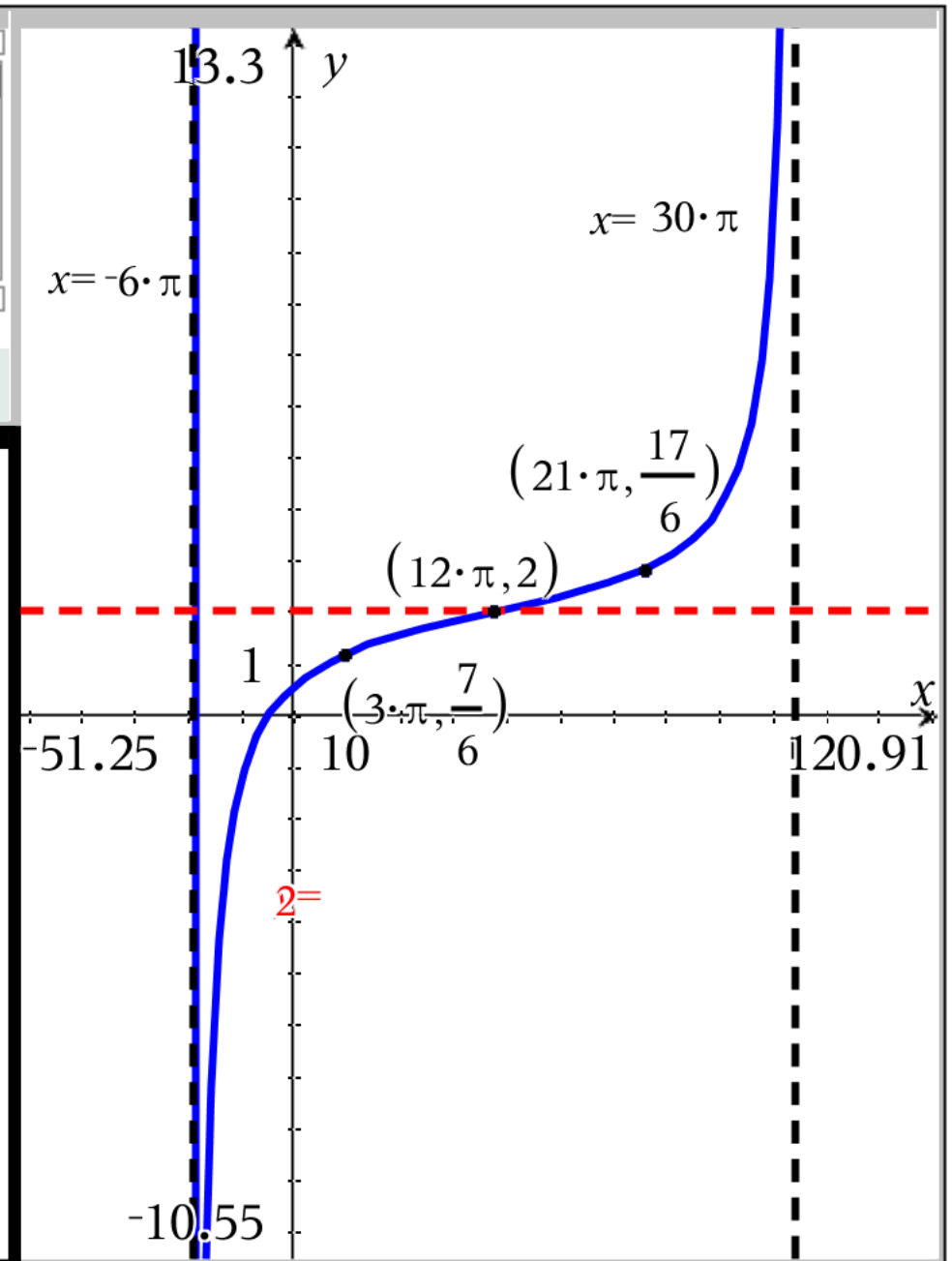


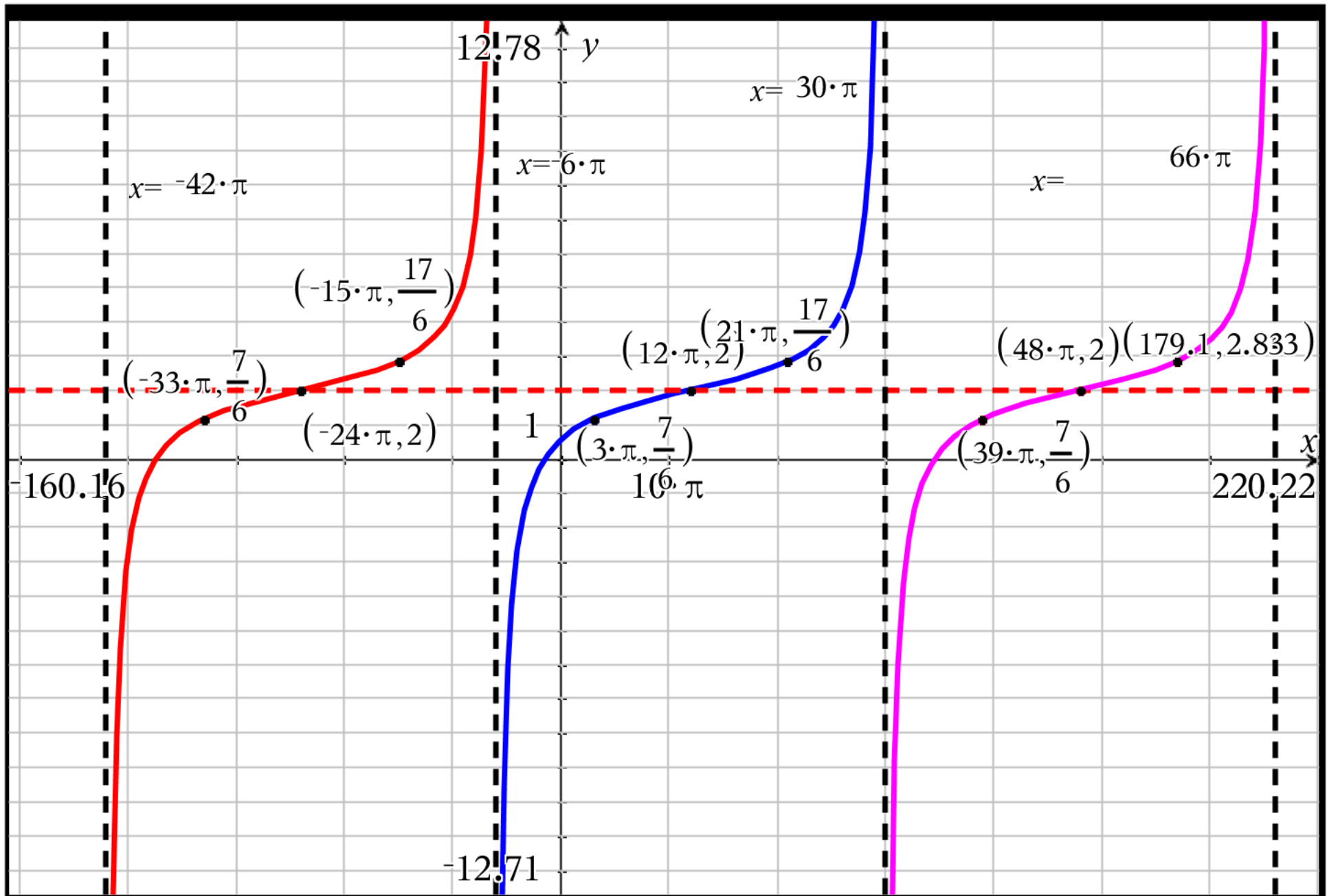
cotangent transformations 3

	A	B	C	D
=				
1 a		-5/6		
A1	a			

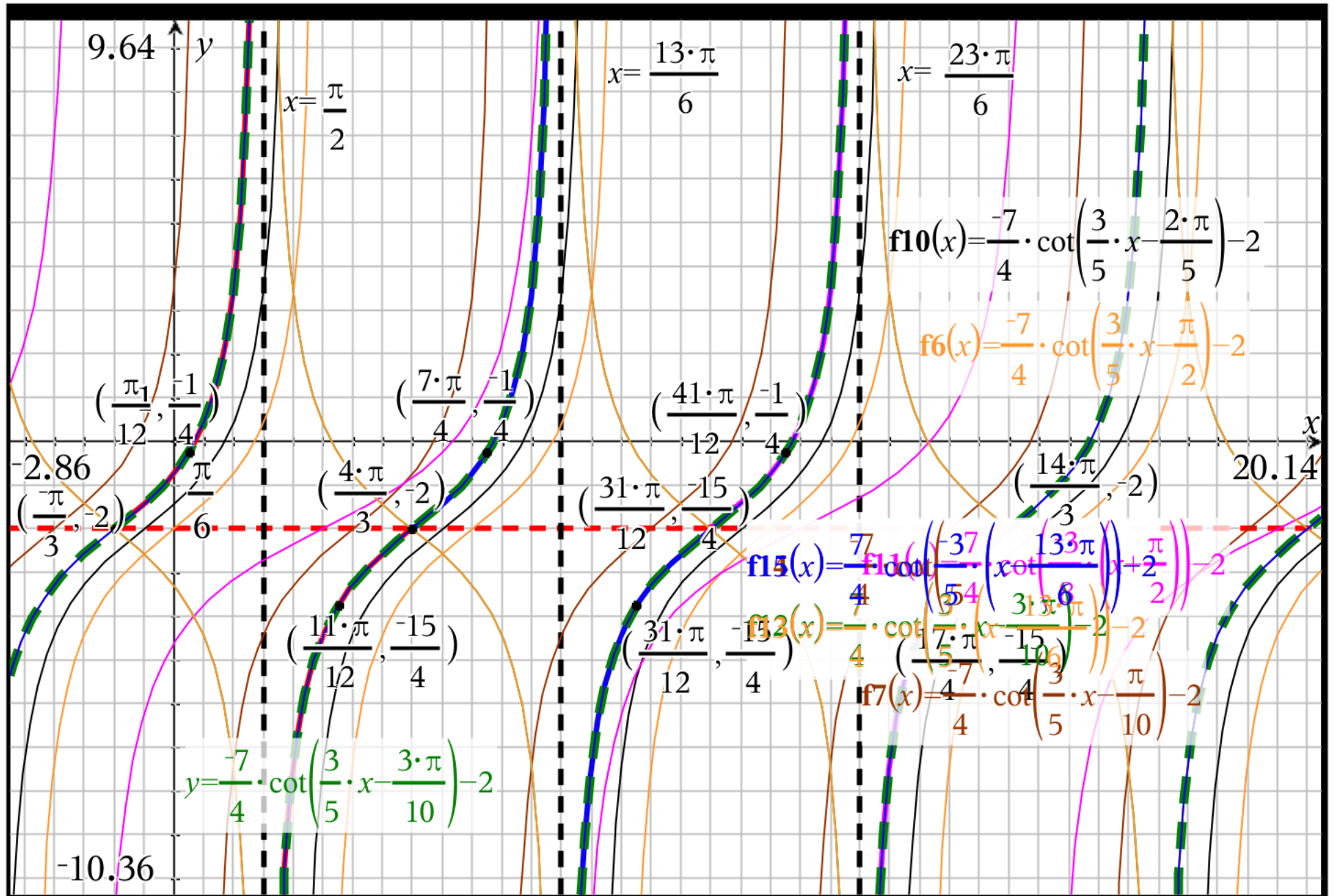
$$y = \frac{-5}{6} \cot\left(\frac{1}{36}(x + 6 \cdot \pi)\right) + 2$$

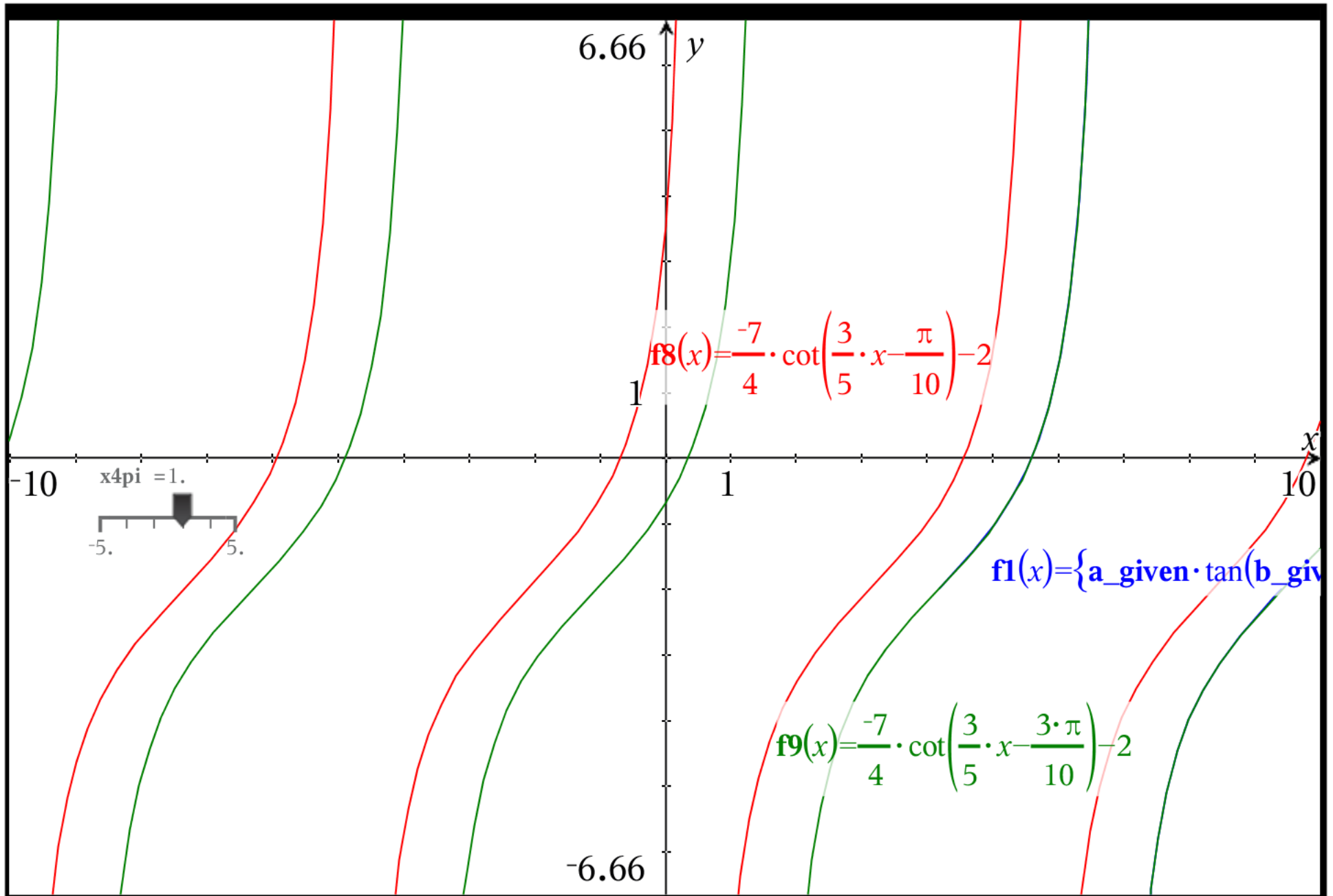
$$y = \frac{-5}{6} \cot\left(\frac{1}{36}x + \frac{\pi}{6}\right) + 2$$
 Period  $[-6 \cdot \pi, 30 \cdot \pi)$   
 "Amplitude"  $\frac{5}{6}$   
 Equation of Midline  $y = 2$   
 Equation of Asymptotes  $x = -6 \cdot \pi$     $x = 30 \cdot \pi$



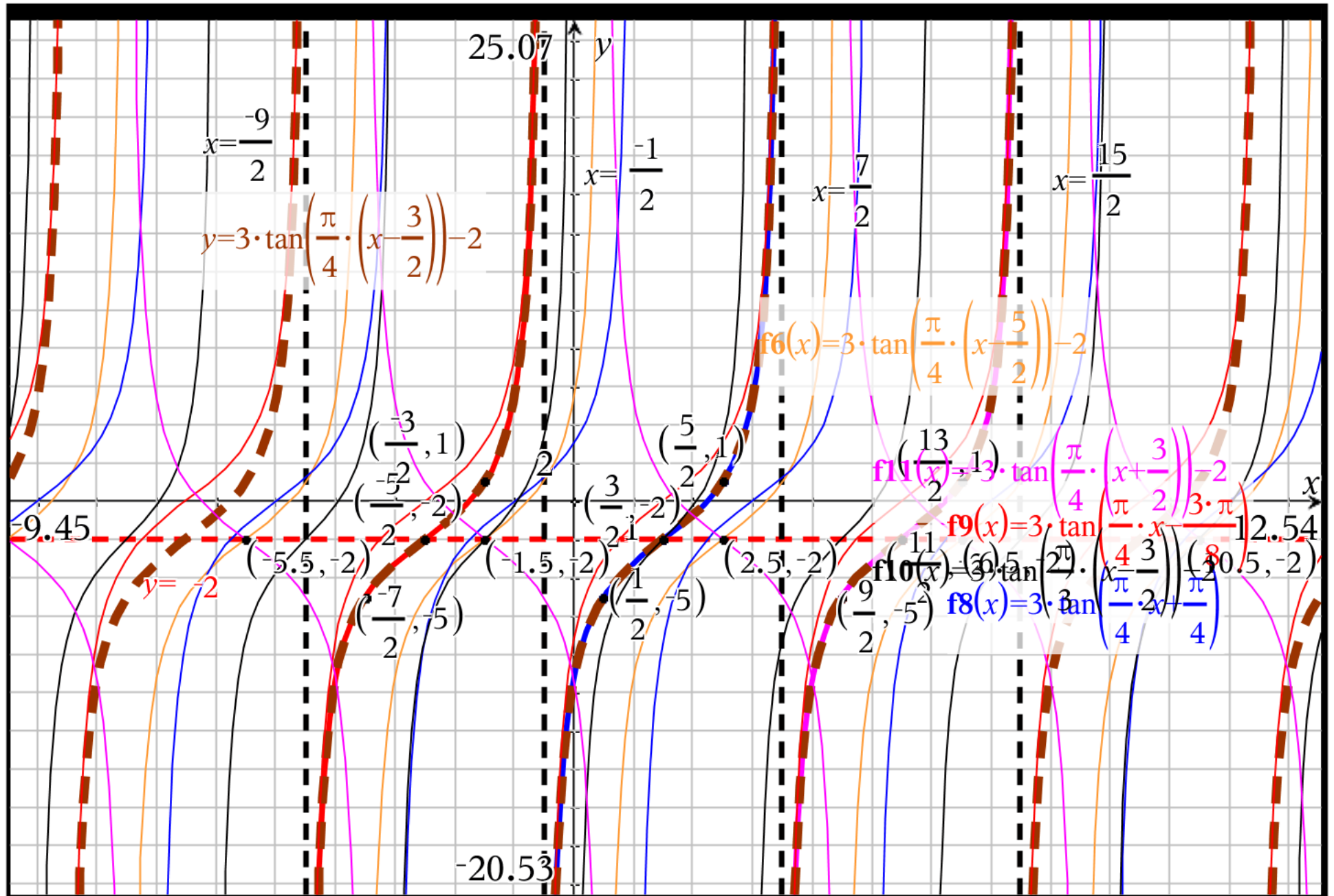


Problem 7

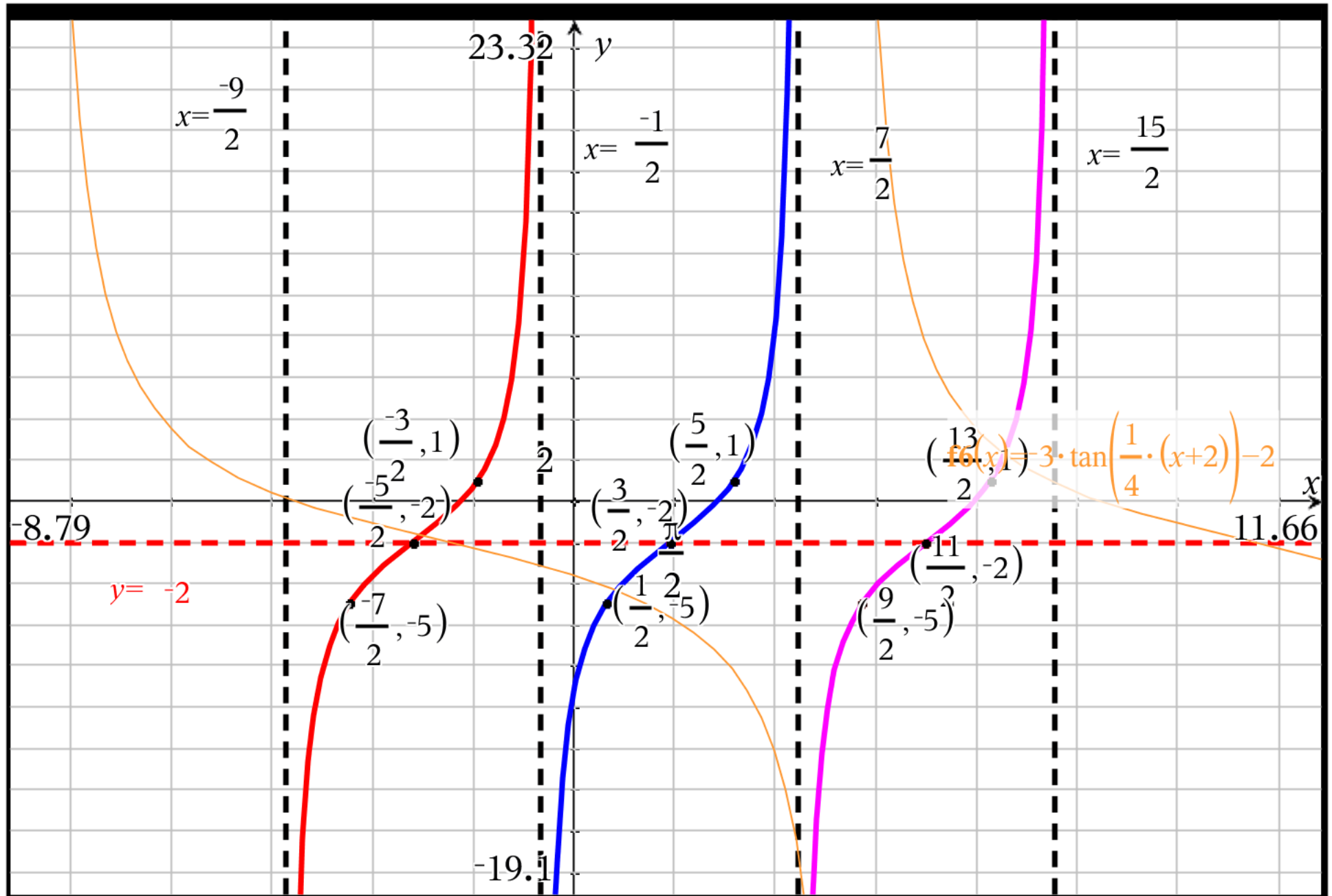




Problem 8

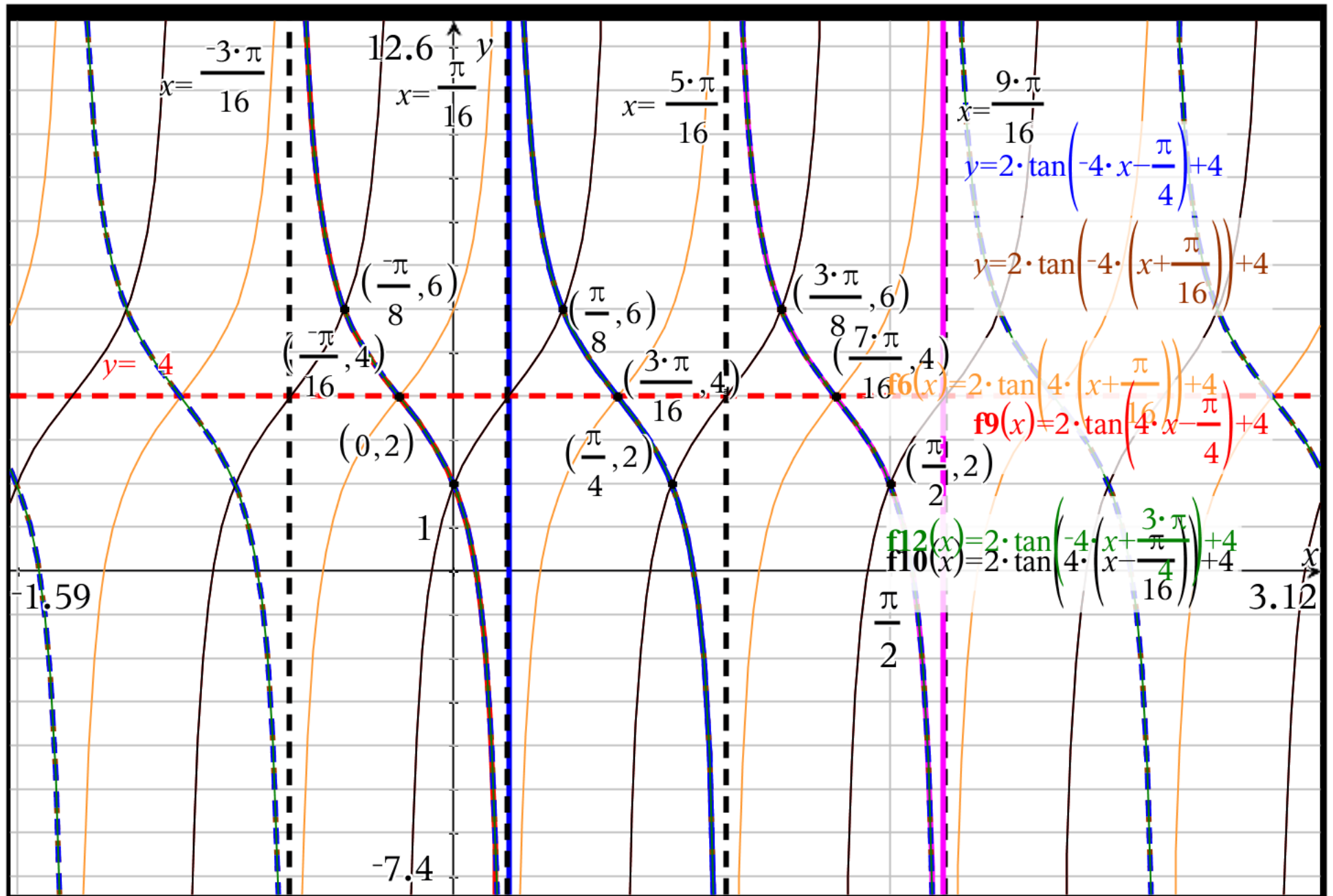


Problem 9





Problem 10



Problem 11

