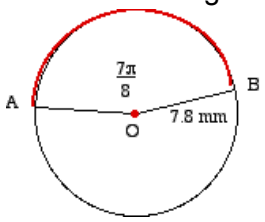
SM3 Test Review Unit 5- Trig Name Period:

For problems 1-8, find all 6 trig functions. ANSWER MUST BE AN EXACT ANSWER. NO DECIMALS!

1. $\sin\frac{\pi}{6}=$ $\csc\frac{\pi}{6}=$ $\cos\frac{\pi}{6}=$ $\sec\frac{\pi}{6}=$ $\tan\frac{\pi}{6}=$ $\cot\frac{\pi}{6}=$	2. $\sin\frac{10\pi}{3}=$ $\csc\frac{10\pi}{3}=$ $\cos\frac{10\pi}{3}=$ $\sec\frac{10\pi}{3}=$ $\tan\frac{10\pi}{3}=$ $\cot\frac{10\pi}{3}=$
3. $\sin\frac{-\pi}{3}=$ $\csc\frac{-\pi}{3}=$ $\cos\frac{-\pi}{3}=$ $\sec\frac{-\pi}{3}=$ $\tan\frac{-\pi}{3}=$ $\cot\frac{-\pi}{3}=$	4. $\sin\frac{-5\pi}{4}=$ $\csc\frac{-5\pi}{4}=$ $\cos\frac{-5\pi}{4}=$ $\sec\frac{-5\pi}{4}=$ $\tan\frac{-5\pi}{4}=$ $\cot\frac{-5\pi}{4}=$
5. $\sin\frac{7\pi}{6}=$ $\csc\frac{7\pi}{6}=$ $\cos\frac{7\pi}{6}=$ $\sec\frac{7\pi}{6}=$ $\tan\frac{7\pi}{6}=$ $\cot\frac{7\pi}{6}=$	6. $\sin\frac{\pi}{2}=$ $\csc\frac{\pi}{2}=$ $\cos\frac{\pi}{2}=$ $\sec\frac{\pi}{2}=$ $\tan\frac{\pi}{2}=$ $\cot\frac{\pi}{2}=$
7. $\sin(-\pi)=$ $\csc(-\pi)=$ $\cos(-\pi)=$ $\sec(-\pi)=$ $\tan(-\pi)=$ $\cot(-\pi)=$	8. Add Rationalizing

9. Convert the angle 600° to radian measure.	10. Divide: $\frac{6x^3-8x+5}{2x-4}$
11. Given the $\cot\theta=\sqrt{3}$ and you are in Quadrant III, find the exact value of the six trig functions.	12.Put a margin of error here
13. Find the length of the arc. 	14. If the length of an arc is 15m and the radius is 5m, what is the radian measure? That radian measure is about ____ degrees.

15. Convert the radian angle to degree measure.	16. Given the $\sin\theta=\frac{3}{7}$, and you are in Quadrant

(Round the final answer to 2 decimal places.)

A. $\frac{7\pi}{13}$

B. 7

II, find the exact values of

$cos\theta =$

$tan\theta =$

$csc\theta =$

$sec\theta =$

$cot\theta =$

17. Find the measure of an angle coterminal to the given angle.

A. $\frac{15\pi}{4}$

B. -73^o

18. Evaluate the following, find the exact values:

A. $tan(-570^o)$

B. $cos\frac{7\pi}{2}$

19. The point (16,-30) lies on the terminal side of θ.

Find:

$sin\theta =$

$cos\theta =$

$tan\theta =$

$csc\theta =$

$sec\theta =$

$cot\theta =$

20.A boy scout spots a tall tree during a hike in the mountains (the tree is perpendicular to the ground). With his compass, he estimates the angle of elevation from the ground to the top of the tree to be 63. If he is standing 24 feet from the base of the tree, how tall is the tree?

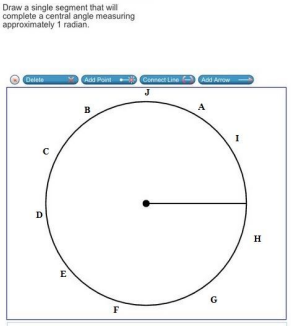
(Round final answer to 1 decimal place and label appropriately.)

Maybe change to an angle of depression.

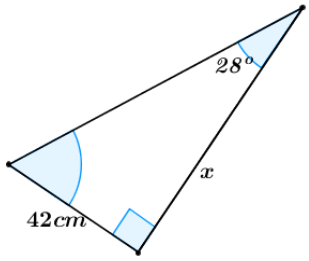
21. Approximate which letter corresponds with the following radian measures

a) 3 radian.

b) 5 radians



22. Solve:

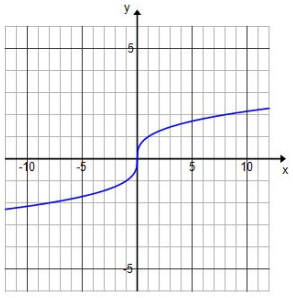


Solve for x:

27. Graph the following transformations for $f(x) = \sqrt[3]{x}$

a) $g(x) = \sqrt[3]{x+2} - 3$

b) $h(x) = -2\sqrt[3]{x}$



28. Solve for x by factoring out an x:

5x -xy = 12