

Rev 41-44

No Calc

- 1 Determine the angle measure in radians
- (a)  $\cot^{-1} \frac{\sqrt{3}}$  (b)  $\csc^{-1} \frac{2\sqrt{3}}{3}$

- 2 If an  $\angle$  measure  $180^\circ$  in standard position, in which quadrant does it's terminal side lie?

- 3 Suppose  $\csc \theta = -25$  &  $0^\circ < \theta < 360^\circ$ . State the value of the other trig functions.

- 4 Questions live 3-5 from no calc part of quiz (5 3s)  
ex @  $\sin 5\pi - \cot 5\pi$  (b)  $\sec(-\frac{12\pi}{5})$

- 5 What ordered pair corresponds to  $-150$

- 6 In what quadrant does  $\theta$  lie if  $\csc \theta < 0$  and  $\cos \theta < 0$

- 7 Evaluate the 6 trig functions if  $\theta = -\frac{5\pi}{6}$

Calc Part

- 8 Use trig ident to transform one side of the eqn to the other.  
Shows all work (11 cos $\theta$ )(1-cos $\theta$ ) =  $\sin 2\theta$

- 9 R +  $\Delta$  word problems - look at examples from notes

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- 10 A pulley of radius  $\frac{1}{2}$  cm turns at  $5$  rev per sec. What is the linear speed of a point on the pulley in cm/sec?

- 11 Evaluate  $\sin(-\frac{37\pi}{6})$

- 12 State the reference  $\angle$  (a)  $-20^\circ$  (b)  $100^\circ$  (c)  $-545^\circ$  (d)  $\frac{10\pi}{3}$  (e)  $\frac{4\pi}{3}$

- 13 If  $\sin \theta = -0.653$ , what is  $\cos(\frac{3}{2}\pi - \theta)$ ?

- 14 Given  $\csc \theta = -\frac{15}{4}$ , determine  $\cot \theta$  &  $\theta$  is in Quadrant IV (a few of these)

- 15 Use trig ident to state the values of the other 5 trig fun  
if  $\cot \theta = -\frac{7}{8}$  and  $\sin \theta > 0$

- 16 Suppose  $(-4, 7)$  lies on the terminal side of  $\theta$ . Use R.A.D.'s to determine the value of the 6 trig functions.

- 17 Given  $\cos \theta = \frac{5}{13}$  &  $\csc \theta < 0$ , determine the remaining trig functions. User

- 18 State the exact value of  $\sec \frac{11\pi}{10} - \cot \frac{4\pi}{3}$

- 19 Change to degree measure (a)  $-\frac{25\pi}{6}$  (b)  $\frac{3\pi}{14}$

- 20 Write in Dms form  $45.8473^\circ$

- 21 Write in decimal form  $15^\circ 31' 41''$

- 22 KNOW VOCABULARY - Fill in the Blank - no words but use

- 23 Reference  $\angle$ , Coterminal, period, trigonometry, radians

- Standard position, Arc length, linear speed

- Determine the degree measure to the nearest tenth of the central  $\angle$  whose inscribed arc is 25 yd &  $\frac{1}{2}$  - radius.

- is 14 yd (a)  $\frac{61}{18\pi}$

- 24 State a pos. & neg. coterminal  $\angle$  for  $750^\circ$  &  $\frac{11\pi}{11}$

- 25 Use a calc. Round to 4 dec. places (a)  $\cot \frac{12\pi}{11}$  (b)  $\sec 417^\circ$

- 26 Solve R +  $\Delta$ s ex.  $\alpha = 32^\circ$   
 $a = 18, b = 14$

$$-\frac{\sqrt{2}}{2} + \sqrt{3}$$

Rev 4.1-4.4 no calc

- ① (a)  $\frac{2\pi}{3}, \frac{5\pi}{3}$  (b)  $\frac{\pi}{3}, \frac{2\pi}{3}$  ② IV

③  $\sin \theta = -\frac{7}{25}$   $\cos \theta = \frac{24}{25}$   $\tan \theta = -\frac{7}{24}$   $\sec \theta = \frac{25}{24}$   $\cot \theta = -\frac{24}{7}$

④ (a)  $\frac{-\sqrt{2} - (-\sqrt{3})}{2} = \frac{-\sqrt{2} + \sqrt{3}}{2}$  (b)  $-\frac{2}{\sqrt{3}} = -\frac{2\sqrt{3}}{3}$

combine

- ⑤  $(-\frac{\sqrt{3}}{2}, \frac{1}{2})$  ⑥ III ⑦ 

Sin	cos	tan	csc	sec	cot
$-\frac{1}{2}$	$-\frac{\sqrt{3}}{2}$	$\frac{\sqrt{3}}{3}$	-2	$-\frac{2\sqrt{3}}{3}$	$\sqrt{3}$

Calc part

- ⑧ From Quiz 4.1-4.3 ⑨ Book ⑩  $420\pi$  cm/sec ⑪  $-\frac{1}{2}$

- ⑫ (a)  $20^\circ$  (b)  $20^\circ$  (c)  $5^\circ$  (d)  $\frac{\pi}{3}$  (e)  $\frac{3\pi}{7}$  ⑬ -2653

⑭  $\cot \theta = -\frac{\sqrt{209}}{4}$  (Remember to simplify  $\sqrt{\quad}$  when possible)

⑮  $\sin \theta = \frac{8\sqrt{89}}{89}$   $\cos \theta = -\frac{5\sqrt{89}}{89}$   $\tan \theta = -\frac{8}{5}$   $\csc \theta = \frac{\sqrt{89}}{8}$   $\sec \theta = -\frac{\sqrt{89}}{5}$

⑯  $\sin \theta = -\frac{3\sqrt{13}}{13}$   $\cos \theta = -\frac{2\sqrt{13}}{13}$   $\tan \theta = \frac{3}{2}$   $\csc \theta = -\frac{\sqrt{13}}{3}$   $\sec \theta = -\frac{\sqrt{13}}{2}$

- ⑰ Given  $\cos \theta = -\frac{6}{11}$  &  $\csc \theta < 0$ , determine the remaining

trig functions Use r

$\sin \theta = -\frac{\sqrt{85}}{11}$   $\tan \theta = -\frac{\sqrt{85}}{6}$   $\csc \theta = -\frac{11\sqrt{85}}{85}$   $\sec \theta = \frac{11}{6}$   $\cot \theta = -\frac{6\sqrt{85}}{85}$

⑱  $\frac{2\sqrt{3}}{3} - \frac{\sqrt{3}}{3} = \frac{\sqrt{3}}{3}$  ⑲  $-\frac{4\pi}{9}$  ⑳ (a)  $-146.68^\circ$  (b)  $33.75^\circ$

- ㉑  $45^\circ 52' 3''$  ㉒  $150614^\circ$  ㉓ - ㉔  $89.5^\circ$

- ㉕ (a)  $390^\circ, -330^\circ$  (b)  $\frac{40\pi}{11}, -\frac{4\pi}{11}$

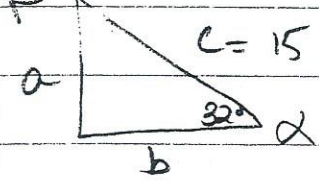
- ㉖ Use a calc. Round to 4 dec. places

(a)  $\cot \frac{17\pi}{12}$  (b)  $\sec 417^\circ$

2679

1.8361

- ㉗ B.  $B = 58^\circ$

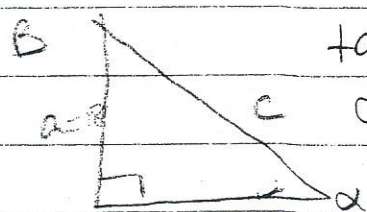


$\sin 32^\circ = \frac{a}{15}$

$a \approx 7.95$

$\cos 32^\circ = \frac{b}{15}$

$b \approx 12.7$



$\tan \alpha = \frac{14}{b}$

$\alpha \approx 52.1^\circ$

$\beta \approx 37.9^\circ$

$b = 14$

$\cos 52.1 = \frac{14}{c}$

$c \approx 29.32$

$c = \frac{14}{\cos 52.1}$