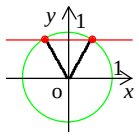
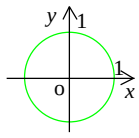
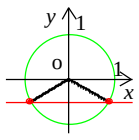
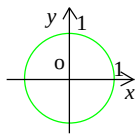
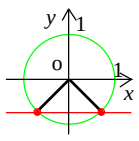
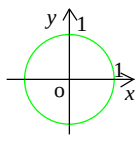
数学Ⅱ　三角関数の応用　課題

(　　)年(　　)組(　　)番(　　)

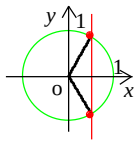
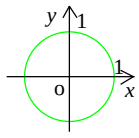
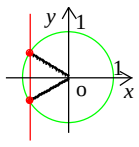
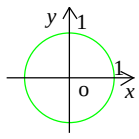
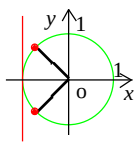
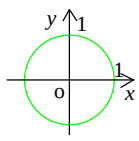
1．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

Find the value of θ that satisfies the following equation.

例題	問題
① $\sin\theta = \frac{\sqrt{3}}{2}$  $\theta = 60^\circ, 120^\circ$	① $\sin\theta = \frac{\sqrt{2}}{2}$ 
② $\sin\theta = -\frac{1}{2}$  $\theta = 210^\circ, 330^\circ$	② $\sin\theta = -\frac{\sqrt{3}}{2}$ 
③ $\sin\theta = -\frac{\sqrt{2}}{2}$  $\theta = 225^\circ, 315^\circ$	③ $\sin\theta = \frac{1}{2}$ 

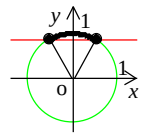
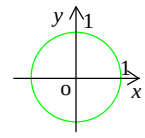
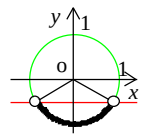
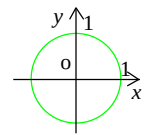
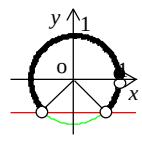
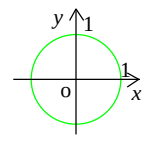
2．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

Find the value of θ that satisfies the following equation.

例題	問題
① $\cos\theta = \frac{1}{2}$  $\theta = 60^\circ, 300^\circ$	① $\cos\theta = \frac{\sqrt{2}}{2}$ 
② $\cos\theta = -\frac{\sqrt{3}}{2}$  $\theta = 150^\circ, 210^\circ$	② $\cos\theta = -\frac{1}{2}$ 
③ $\cos\theta = -\frac{\sqrt{2}}{2}$  $\theta = 135^\circ, 225^\circ$	③ $\cos\theta = \frac{\sqrt{3}}{2}$ 

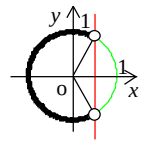
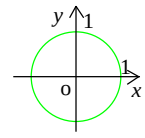
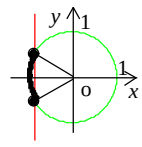
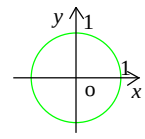
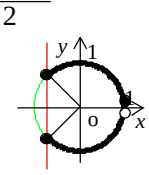
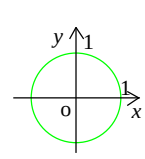
3．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

Find the value of θ that satisfies the following inequality.

例題	問題
① $\sin\theta \geqq \frac{\sqrt{3}}{2}$  $60^\circ \leqq \theta \leqq 120^\circ$	① $\sin\theta \geqq \frac{\sqrt{2}}{2}$ 
② $\sin\theta < -\frac{1}{2}$  $210^\circ < \theta < 330^\circ$	② $\sin\theta < -\frac{\sqrt{3}}{2}$ 
③ $\sin\theta > -\frac{\sqrt{2}}{2}$  $0^\circ \leqq \theta < 225^\circ$ $315^\circ < \theta < 360^\circ$	③ $\sin\theta < \frac{1}{2}$ 

4．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

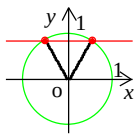
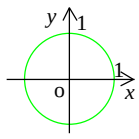
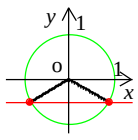
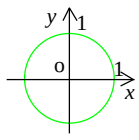
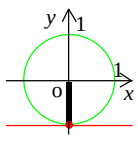
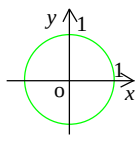
Find the value of θ that satisfies the following inequality.

例題	問題
① $\cos\theta < \frac{1}{2}$  $60^\circ < \theta < 300^\circ$	① $\cos\theta < \frac{\sqrt{2}}{2}$ 
② $\cos\theta \leqq -\frac{\sqrt{3}}{2}$  $150^\circ < \theta < 210^\circ$	② $\cos\theta \leqq -\frac{1}{2}$ 
③ $\cos\theta \geqq -\frac{\sqrt{2}}{2}$  $0^\circ \leqq \theta \leqq 135^\circ$ $225^\circ \leqq \theta < 360^\circ$	③ $\cos\theta \geqq \frac{\sqrt{3}}{2}$ 

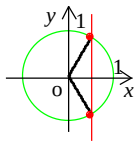
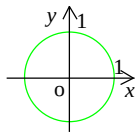
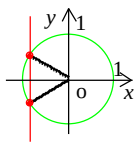
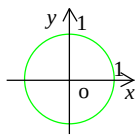
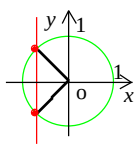
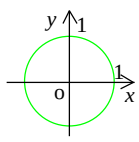
数学Ⅱ　三角方程式　課題

(　　)年(　　)組(　　)番(　　)

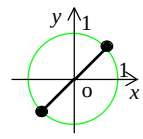
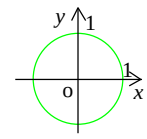
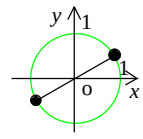
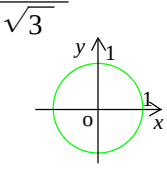
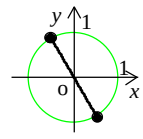
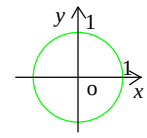
1．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\sin\theta = \frac{\sqrt{3}}{2}$　(高さ)  $\theta = 60^\circ, 120^\circ$	① $\sin\theta = \frac{\sqrt{2}}{2}$ 
② $\sin\theta = -\frac{1}{2}$  $\theta = 210^\circ, 330^\circ$	② $\sin\theta = -\frac{\sqrt{3}}{2}$ 
③ $\sin\theta = -1$  $\theta = 270^\circ$	③ $\sin\theta = 1$ 

2．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\cos\theta = \frac{1}{2}$　(横)  $\theta = 60^\circ, 300^\circ$	① $\cos\theta = \frac{\sqrt{2}}{2}$ 
② $\cos\theta = -\frac{\sqrt{3}}{2}$  $\theta = 150^\circ, 210^\circ$	② $\cos\theta = -\frac{1}{2}$ 
③ $\cos\theta = -\frac{\sqrt{2}}{2}$  $\theta = 135^\circ, 225^\circ$	③ $\cos\theta = \frac{\sqrt{3}}{2}$ 

3．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\tan\theta = 1$　(傾き)  $\theta = 45^\circ, 135^\circ$	① $\tan\theta = 0$ 
② $\tan\theta = \frac{1}{\sqrt{3}}$  $\theta = 30^\circ, 210^\circ$	② $\tan\theta = -\frac{1}{\sqrt{3}}$ 
③ $\tan\theta = -\sqrt{3}$  $\theta = 120^\circ, 300^\circ$	③ $\tan\theta = \sqrt{3}$ 

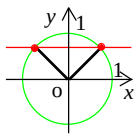
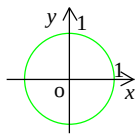
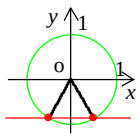
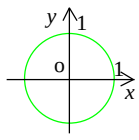
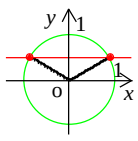
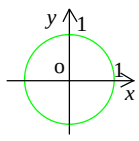
4．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\sin(\theta + 30^\circ) = \frac{\sqrt{3}}{2}$ $\theta + 30^\circ = 60^\circ$ または $\theta + 30^\circ = 120^\circ$ よって，$\theta = 30^\circ, 90^\circ$	① $\sin(\theta + 20^\circ) = \frac{\sqrt{2}}{2}$
② $\sin(\theta + 90^\circ) = \frac{\sqrt{3}}{2}$ $\theta + 90^\circ = 60^\circ$ は不適 $\theta + 90^\circ = 120^\circ$ または $\theta + 90^\circ = 420^\circ$ よって，$\theta = 30^\circ, 330^\circ$	② $\sin(\theta + 60^\circ) = \frac{\sqrt{2}}{2}$

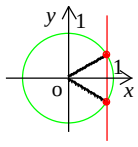
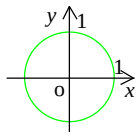
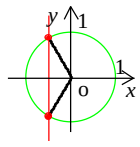
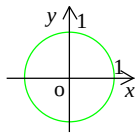
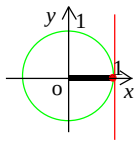
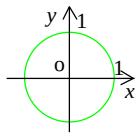
数学Ⅱ　三角方程式　2　課題

(　　)年(　　)組(　　)番(　　)

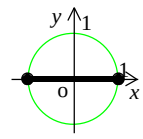
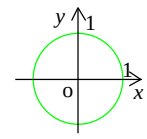
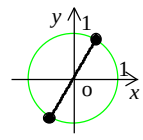
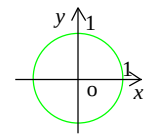
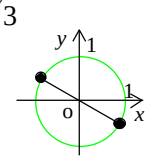
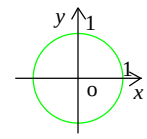
1．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\sin\theta = \dfrac{\sqrt{2}}{2}$　(高さ)  $\theta = 45^\circ, 135^\circ$	① $\sin\theta = \dfrac{\sqrt{3}}{2}$ 
② $\sin\theta = -\dfrac{\sqrt{3}}{2}$  $\theta = 210^\circ, 330^\circ$	② $\sin\theta = -\dfrac{\sqrt{2}}{2}$ 
③ $\sin\theta = \dfrac{1}{2}$  $\theta = 30^\circ, 150^\circ$	③ $\sin\theta = -\dfrac{1}{2}$ 

2．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\cos\theta = \dfrac{\sqrt{3}}{2}$　(横)  $\theta = 60^\circ, 300^\circ$	① $\cos\theta = \dfrac{\sqrt{2}}{2}$ 
② $\cos\theta = -\dfrac{1}{2}$  $\theta = 120^\circ, 240^\circ$	② $\cos\theta = \dfrac{1}{2}$ 
③ $\cos\theta = 1$  $\theta = 0^\circ$	③ $\cos\theta = -1$ 

3．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\tan\theta = 0$　(傾き)  $\theta = 0^\circ, 180^\circ$	① $\tan\theta = -1$ 
② $\tan\theta = \sqrt{3}$  $\theta = 60^\circ,\ 240^\circ$	② $\tan\theta = -\sqrt{3}$ 
③ $\tan\theta = -\dfrac{1}{\sqrt{3}}$  $\theta = 150^\circ,\ 330^\circ$	② $\tan\theta = \dfrac{1}{\sqrt{3}}$ 

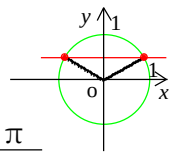
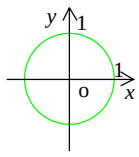
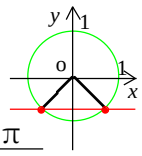
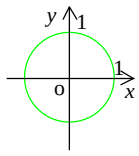
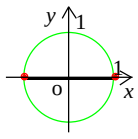
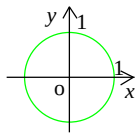
4．次の等式を満たす θ の値を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題	問題
① $\cos(\theta - 60^\circ) = -\dfrac{1}{2}$ $\theta - 60^\circ = 120^\circ$ または $\theta - 60^\circ = 240^\circ$ よって，$\theta = 180^\circ, 300^\circ$	① $\cos(\theta - 30^\circ) = \dfrac{\sqrt{3}}{2}$
② $\cos(\theta - 90^\circ) = \dfrac{\sqrt{3}}{2}$ $\theta - 90^\circ = 30^\circ$ または $\theta - 90^\circ = -30^\circ$ よって，$\theta = 60^\circ, 120^\circ$	② $\cos(\theta - 60^\circ) = \dfrac{\sqrt{2}}{2}$

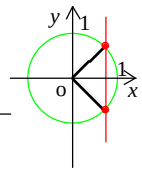
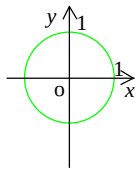
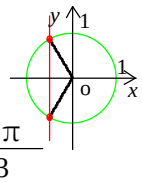
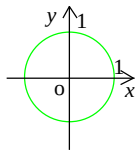
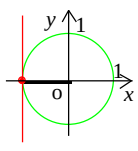
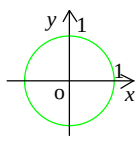
数学Ⅱ　三角方程式 3 課題

(　　)年(　　)組(　　)番(　　)

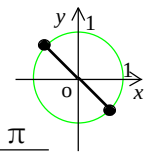
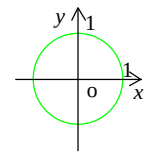
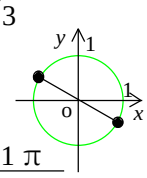
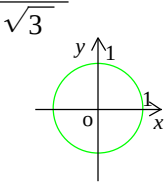
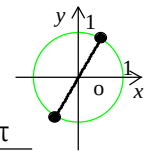
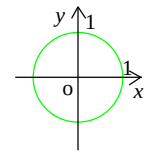
1．次の等式を満たす θ の値を求めよ。$(0 \leqq \theta < 2\pi)$

例題	問題
① $\sin\theta = \frac{1}{2}$　(高さ)  $\theta = \frac{\pi}{6}, \frac{5\pi}{6}$	① $\sin\theta = -\frac{\sqrt{3}}{2}$ 
② $\sin\theta = -\frac{\sqrt{2}}{2}$  $\theta = \frac{5\pi}{4}, \frac{7\pi}{4}$	② $\sin\theta = \frac{\sqrt{2}}{2}$ 
③ $\sin\theta = 0$  $\theta = 0,\ \pi$	③ $\sin\theta = -1$ 

2．次の等式を満たす θ の値を求めよ。$(0 \leqq \theta < 2\pi)$

例題	問題
① $\cos\theta = \frac{\sqrt{2}}{2}$　(横)  $\theta = \frac{\pi}{4}, \frac{7\pi}{4}$	① $\cos\theta = \frac{1}{2}$ 
② $\cos\theta = -\frac{1}{2}$  $\theta = \frac{2\pi}{3}, \frac{4\pi}{3}$	② $\cos\theta = \frac{\sqrt{3}}{2}$ 
③ $\cos\theta = -1$  $\theta = \pi$	③ $\cos\theta = 1$ 

3．次の等式を満たす θ の値を求めよ。$(0 \leqq \theta < 2\pi)$

例題	問題
① $\tan\theta = -1$　(傾き)  $\theta = \frac{3\pi}{4}, \frac{7\pi}{4}$	① $\tan\theta = 1$ 
② $\tan\theta = -\frac{1}{\sqrt{3}}$  $\theta = \frac{5\pi}{6}, \frac{11\pi}{6}$	② $\tan\theta = -\frac{1}{\sqrt{3}}$ 
③ $\tan\theta = \sqrt{3}$  $\theta = \frac{\pi}{3}, \frac{4\pi}{3}$	③ $\tan\theta = -\sqrt{3}$ 

4．次の等式を満たす θ の値を求めよ。$(0 \leqq \theta < 2\pi)$

例題	問題
① $\sin\left(\theta + \frac{\pi}{6}\right) = \frac{\sqrt{3}}{2}$ $\theta + \frac{\pi}{6} = \frac{\pi}{3}$ または $\theta + \frac{\pi}{6} = \frac{2\pi}{3}$ よって，$\theta = \frac{\pi}{6}, \frac{\pi}{2}$	① $\sin\left(\theta + \frac{\pi}{6}\right) = -\frac{1}{2}$
② $\sin\left(\theta + \frac{\pi}{2}\right) = \frac{\sqrt{2}}{2}$ $\frac{\pi}{2} \leqq \theta + \frac{\pi}{2} < \frac{5\pi}{2}$ $\theta + \frac{\pi}{2} = \frac{3\pi}{4}$ または $\theta + \frac{\pi}{2} = \frac{9\pi}{4}$ よって $\theta = \frac{\pi}{4}, \frac{7\pi}{4}$	② $\sin\left(\theta - \frac{\pi}{2}\right) = \frac{1}{2}$

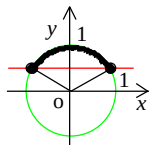
数学Ⅱ　三角不等式　課題

(　　)年(　　)組(　　)番(　　)

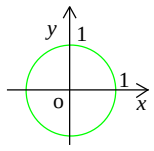
1．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\sin\theta \geqq \frac{1}{2}$

$30^\circ \leqq \theta \leqq 150^\circ$

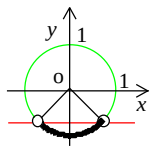


問題①　$\sin\theta \geqq \frac{\sqrt{3}}{2}$

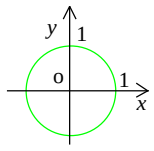


例題②　$\sin\theta < -\frac{\sqrt{2}}{2}$

$210^\circ < \theta < 330^\circ$

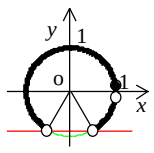


問題②　$\sin\theta < -\frac{1}{2}$

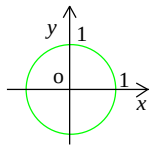


例題③　$\sin\theta > -\frac{\sqrt{3}}{2}$

$0^\circ \leqq \theta < 240^\circ,\ 300^\circ < \theta < 360^\circ$

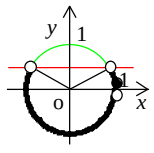


問題③　$\sin\theta > -\frac{\sqrt{2}}{2}$

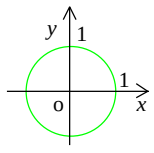


例題④　$\sin\theta < \frac{1}{2}$

$0^\circ \leqq \theta < 30^\circ, 150^\circ < \theta < 360^\circ,$



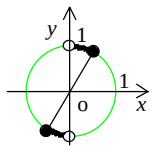
問題④　$\sin\theta < \frac{\sqrt{2}}{2}$



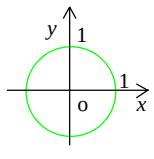
2．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\tan\theta \geqq \sqrt{3}$

$60^\circ \leqq \theta < 90^\circ,\ 240^\circ \leqq \theta < 270^\circ$



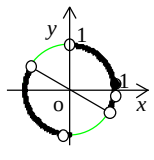
問題①　$\tan\theta \geqq 1$



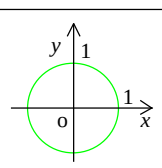
例題②　$\tan\theta > -\frac{1}{\sqrt{3}}$

$0^\circ \leqq \theta < 90^\circ,\ 150^\circ < \theta < 270^\circ$

$330^\circ < \theta < 360^\circ$



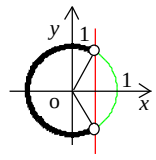
問題②　$\tan\theta > -\sqrt{3}$



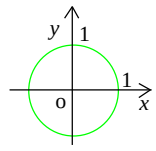
3．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\cos\theta < \frac{1}{2}$

$30^\circ < \theta < 150^\circ$

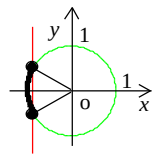


問題①　$\cos\theta < \frac{\sqrt{2}}{2}$

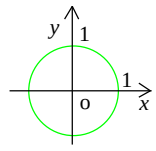


例題②　$\cos\theta \leqq -\frac{\sqrt{3}}{2}$

$150^\circ \leqq \theta \leqq 210^\circ$

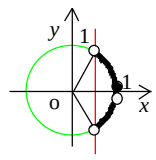


問題②　$\cos\theta \leqq -\frac{1}{2}$

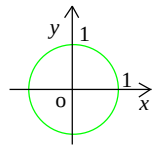


例題③　$\cos\theta > \frac{1}{2}$

$0^\circ \leqq \theta < 60^\circ,\ 300^\circ < \theta < 360^\circ$

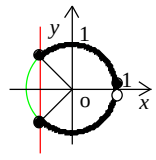


問題③　$\cos\theta > \frac{\sqrt{2}}{2}$

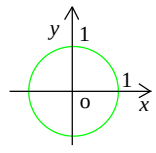


例題④　$\cos\theta \geqq -\frac{\sqrt{2}}{2}$

$0^\circ \leqq \theta \leqq 135^\circ, 225^\circ \leqq \theta < 360^\circ,$



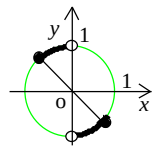
問題④　$\cos\theta \geqq -\frac{\sqrt{3}}{2}$



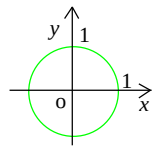
4．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\tan\theta \leqq -1$

$90^\circ < \theta \leqq 135^\circ,\ 270^\circ < \theta \leqq 315^\circ$



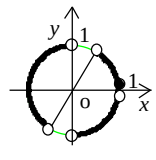
問題①　$\tan \leqq -\frac{1}{\sqrt{3}}$



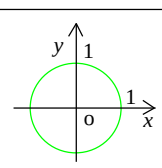
例題②　$\tan\theta < \sqrt{3}$

$0^\circ \leqq \theta < 60^\circ,\ 90^\circ < \theta < 240^\circ$

$270^\circ < \theta < 360^\circ$



問題②　$\tan\theta < \frac{1}{\sqrt{3}}$



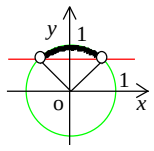
数学Ⅱ　三角不等式　2　課題

(　　)年(　　)組(　　)番(　　)

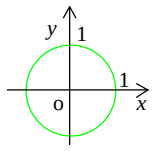
1．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\sin\theta > \frac{\sqrt{2}}{2}$

$45^\circ < \theta < 135^\circ$

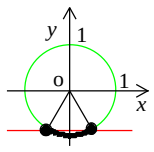


問題①　$\sin\theta > \frac{1}{2}$

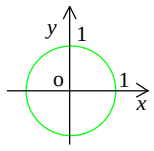


例題②　$\sin\theta \leqq -\frac{\sqrt{3}}{2}$

$240^\circ \leqq \theta < 300^\circ$

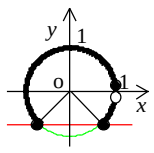


問題②　$\sin\theta \leqq -\frac{\sqrt{2}}{2}$

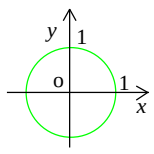


例題③　$\sin\theta \geqq -\frac{\sqrt{2}}{2}$

$0^\circ \leqq \theta \leqq 225^\circ,\ 315^\circ \leqq \theta < 360^\circ$

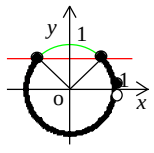


問題③　$\sin\theta > -\frac{1}{2}$

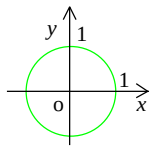


例題④　$\sin\theta \leqq \frac{\sqrt{2}}{2}$

$0^\circ \leqq \theta \leqq 30^\circ, 150^\circ \leqq \theta < 360^\circ$



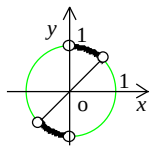
問題④　$\sin\theta < \frac{\sqrt{3}}{2}$



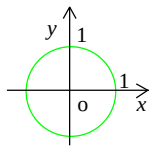
2．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\tan\theta > 1$

$45^\circ < \theta < 90^\circ,\ 135^\circ < \theta < 270^\circ$



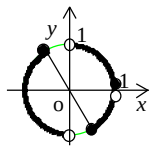
問題①　$\tan\theta > \frac{1}{\sqrt{3}}$



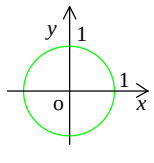
例題②　$\tan\theta \geqq -\sqrt{3}$

$0^\circ \leqq \theta < 90^\circ,\ 120^\circ \leqq \theta < 270^\circ$

$300^\circ < \theta < 360^\circ$



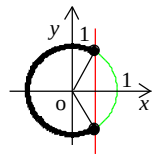
問題②　$\tan\theta \geqq -1$



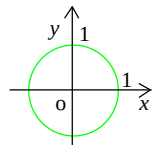
3．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\cos\theta \leqq \frac{\sqrt{3}}{2}$

$30^\circ \leqq \theta \leqq 150^\circ$

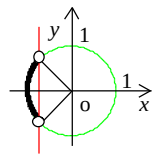


問題①　$\cos\theta \leqq \frac{1}{2}$

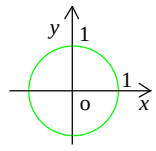


例題②　$\cos\theta < -\frac{\sqrt{2}}{2}$

$150^\circ < \theta < 210^\circ$

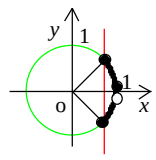


問題②　$\cos\theta < -\frac{\sqrt{3}}{2}$

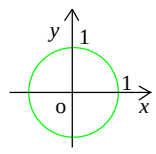


例題③　$\cos\theta \geqq \frac{\sqrt{2}}{2}$

$0^\circ \leqq \theta < 60^\circ,\ 300^\circ < \theta < 360^\circ$

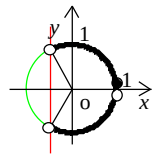


問題③　$\cos\theta \geqq \frac{1}{2}$

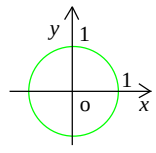


例題④　$\cos\theta > -\frac{\sqrt{3}}{2}$

$0^\circ \leqq \theta < 120^\circ, 240^\circ < \theta < 360^\circ,$



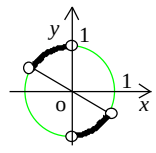
問題④　$\cos\theta > -\frac{\sqrt{2}}{2}$



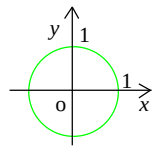
4．次の不等式を満たす θ の範囲を求めよ。$(0^\circ \leqq \theta < 360^\circ)$

例題①　$\tan\theta < -\frac{1}{\sqrt{3}}$

$90^\circ < \theta < 150^\circ,\ 270^\circ < \theta < 330^\circ$



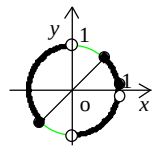
問題①　$\tan\theta < -\sqrt{3}$



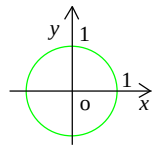
例題②　$\tan\theta \leqq -1$

$0^\circ \leqq \theta \leqq 45^\circ,\ 90^\circ < \theta \leqq 225^\circ$

$270^\circ < \theta < 360^\circ$



問題②　$\tan\theta < \sqrt{3}$



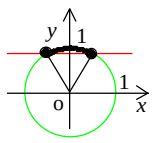
数学Ⅱ　三角不等式 3 課題

(　　)年(　　)組(　　)番(　　)

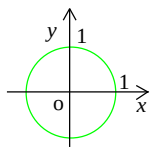
1．次の不等式を満たす θ の範囲を求めよ。$(0 \leqq \theta < 2\pi)$

例題①　$\sin\theta \geqq \dfrac{\sqrt{3}}{2}$

$\dfrac{\pi}{3} \leqq \theta \leqq \dfrac{2\pi}{3}$

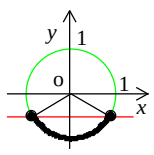


問題①　$\sin\theta \geqq \dfrac{\sqrt{2}}{2}$

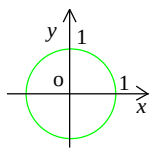


例題②　$\sin\theta < -\dfrac{1}{2}$

$\dfrac{7\pi}{6} < \theta < \dfrac{11\pi}{6}$

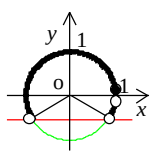


問題②　$\sin\theta < 0$

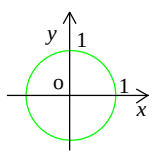


例題③　$\sin\theta > -\dfrac{1}{2}$

$0 \leqq \theta < \dfrac{7\pi}{6},\quad \dfrac{11\pi}{6} < \theta < 2\pi$

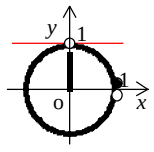


問題③　$\sin\theta > -\dfrac{\sqrt{3}}{2}$

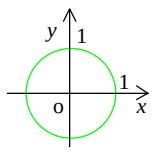


例題④　$\sin\theta < 1$

$0 \leqq \theta < \dfrac{\pi}{2},\quad \dfrac{\pi}{2} < \theta < 2\pi$



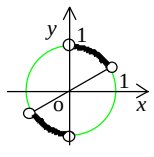
問題④　$\sin\theta < \dfrac{1}{2}$



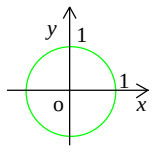
2．次の不等式を満たす θ の範囲を求めよ。$(0 \leqq \theta < 2\pi)$

例題①　$\tan\theta > \dfrac{1}{\sqrt{3}}$

$\dfrac{\pi}{6} < \theta < \dfrac{\pi}{2},\quad \dfrac{7\pi}{6} < \theta < \dfrac{3\pi}{2}$

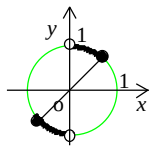


問題①　$\tan\theta > \sqrt{3}$

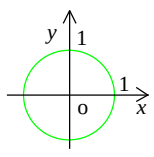


例題②　$\tan\theta \geqq 1$

$\dfrac{\pi}{4} \leqq \theta < \dfrac{\pi}{2},\quad \dfrac{5\pi}{4} \leqq \theta < \dfrac{3\pi}{2}$



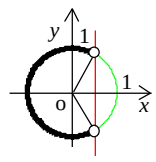
問題②　$\tan\theta \geqq -1$



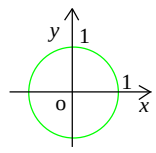
3．次の不等式を満たす θ の範囲を求めよ。$(0 \leqq \theta < 2\pi)$

例題①　$\cos\theta < \dfrac{1}{2}$

$\dfrac{\pi}{3} \leqq \theta \leqq \dfrac{5\pi}{3}$

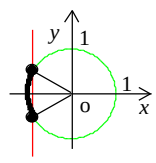


問題①　$\cos\theta < \dfrac{\sqrt{2}}{2}$

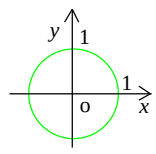


例題②　$\cos\theta \leqq -\dfrac{\sqrt{3}}{2}$

$\dfrac{5\pi}{6} \leqq \theta \leqq \dfrac{7\pi}{6}$

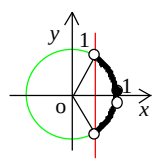


問題②　$\cos\theta \leqq -\dfrac{1}{2}$

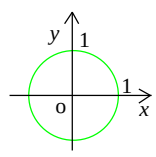


例題③　$\cos\theta > \dfrac{1}{2}$

$0 \leqq \theta < \dfrac{\pi}{3},\quad \dfrac{5\pi}{3} < \theta < 2\pi$

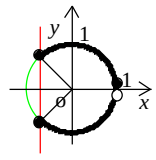


問題③　$\cos\theta > \dfrac{\sqrt{2}}{2}$

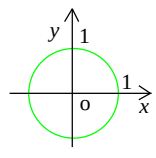


例題④　$\cos\theta \geqq -\dfrac{\sqrt{2}}{2}$

$0 \leqq \theta < \dfrac{3\pi}{4},\quad \dfrac{5\pi}{4} < \theta < 2\pi$



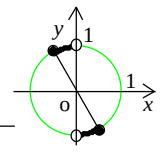
問題④　$\cos\theta \geqq -\dfrac{\sqrt{3}}{2}$



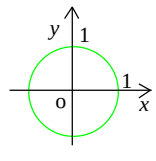
4．次の不等式を満たす θ の範囲を求めよ。$(0 \leqq \theta < 2\pi)$

例題①　$\tan\theta \leqq -\sqrt{3}$

$\dfrac{\pi}{2} < \theta \leqq \dfrac{2\pi}{3},\quad \dfrac{3\pi}{2} < \theta \leqq \dfrac{5\pi}{3}$



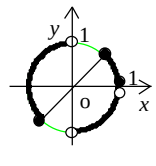
問題①　$\tan \leqq -1$



例題②　$\tan\theta \leqq 1$

$0 \leqq \theta \leqq \dfrac{\pi}{4},\quad \dfrac{\pi}{2} < \theta \leqq \dfrac{5\pi}{4}$

$\dfrac{3\pi}{2} < \theta < 2\pi$



問題②　$\tan\theta \leqq \sqrt{3}$