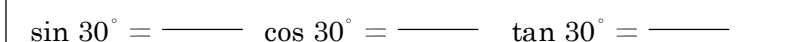
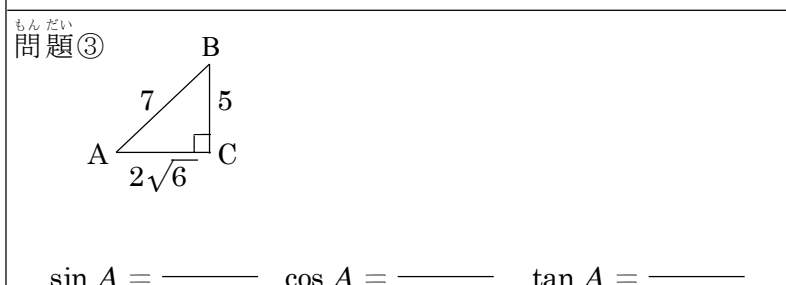
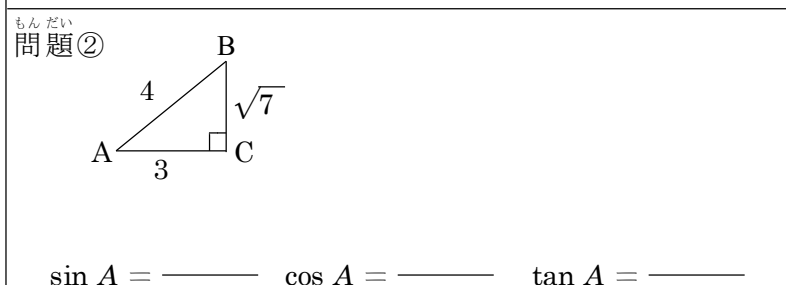
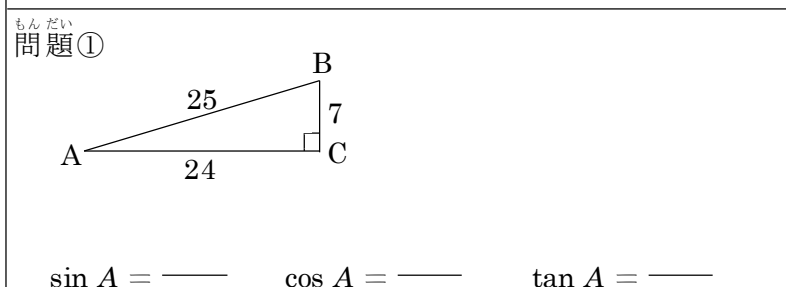
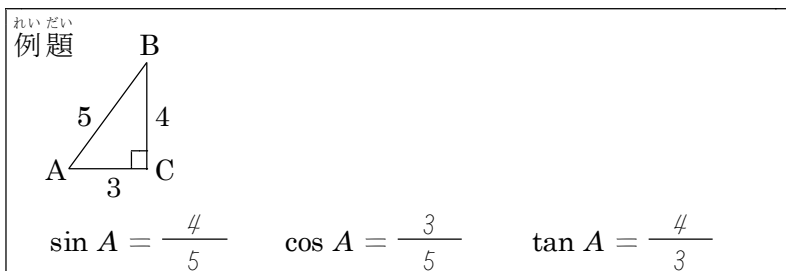
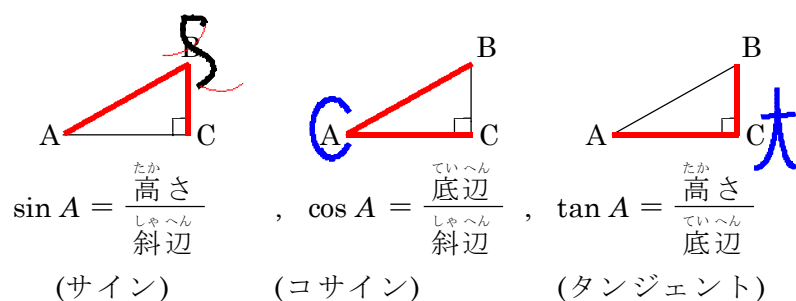


数学Ⅰ 三角比 課題

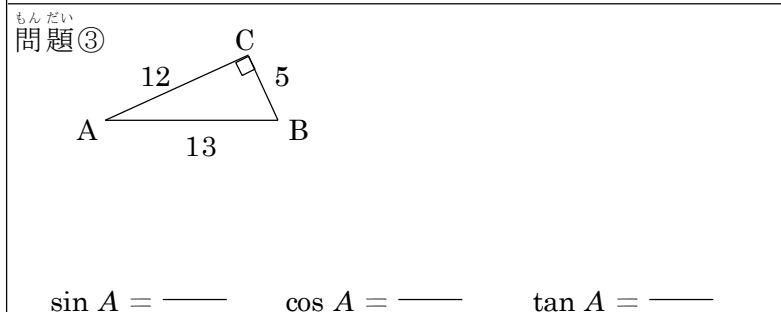
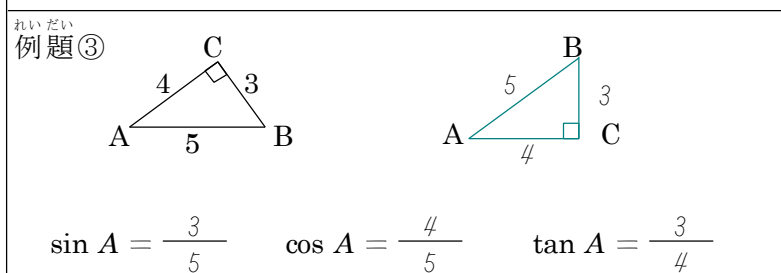
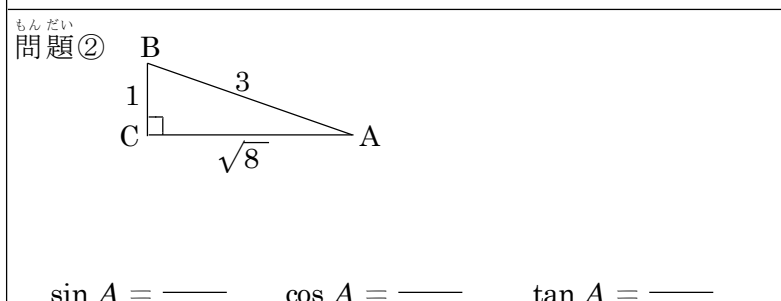
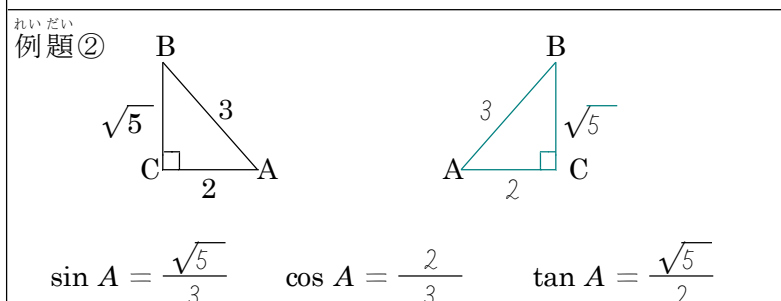
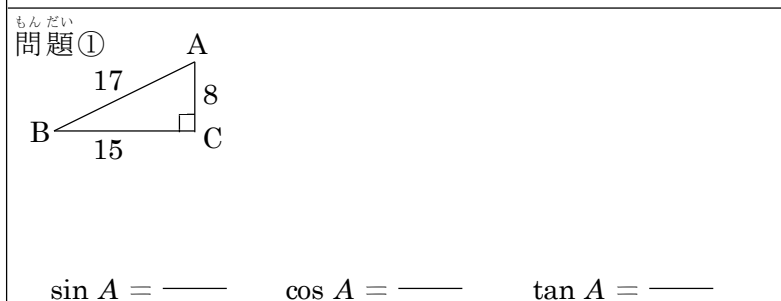
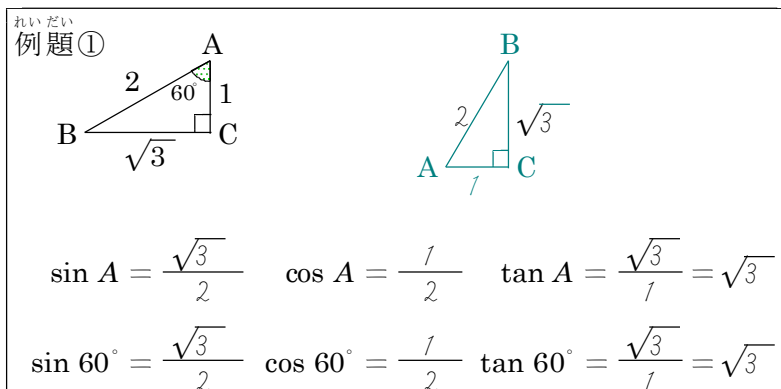
()年()組()番()

1. 次の三角比を求めよ。 Find the following trigonometric ratios.



2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

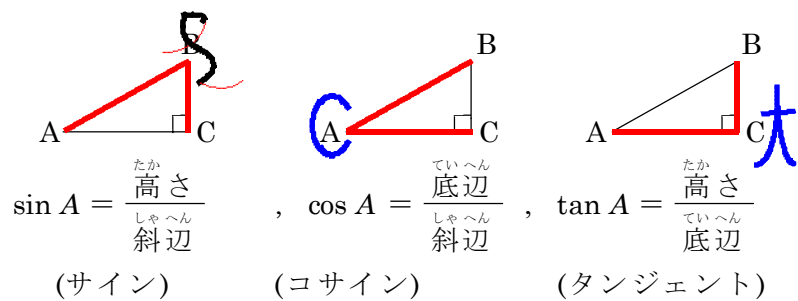
※調べる角を左、直角を右にする。



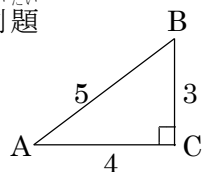
数学Ⅰ 三角比 2 課題

()年()組()番()

1. 次の三角比を求めよ。 Find the following trigonometric ratios.

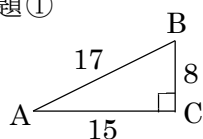


例題



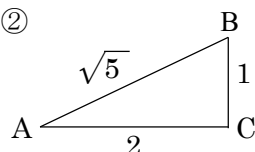
$$\sin A = \frac{3}{5} \quad \cos A = \frac{4}{5} \quad \tan A = \frac{3}{4}$$

問題①



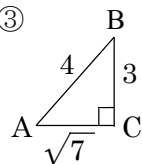
$$\sin A = \frac{8}{17} \quad \cos A = \frac{15}{17} \quad \tan A = \frac{8}{15}$$

問題②



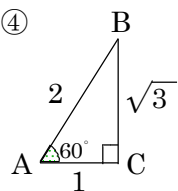
$$\sin A = \frac{1}{\sqrt{5}} \quad \cos A = \frac{2}{\sqrt{5}} \quad \tan A = \frac{1}{2}$$

問題③



$$\sin A = \frac{3}{4} \quad \cos A = \frac{\sqrt{7}}{4} \quad \tan A = \frac{3}{\sqrt{7}}$$

問題④



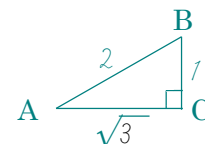
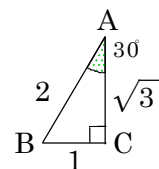
$$\sin A = \frac{\sqrt{3}}{2} \quad \cos A = \frac{1}{2} \quad \tan A = \sqrt{3}$$

$$\sin 60^\circ = \frac{\sqrt{3}}{2} \quad \cos 60^\circ = \frac{1}{2} \quad \tan 60^\circ = \sqrt{3}$$

2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

※調べる角を左、直角を右にする。

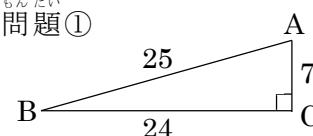
例題①



$$\sin A = \frac{1}{2} \quad \cos A = \frac{\sqrt{3}}{2} \quad \tan A = \frac{1}{\sqrt{3}}$$

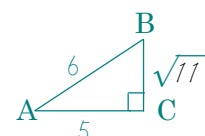
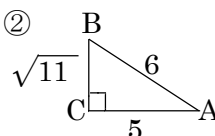
$$\sin 30^\circ = \frac{1}{2} \quad \cos 30^\circ = \frac{\sqrt{3}}{2} \quad \tan 30^\circ = \frac{1}{\sqrt{3}}$$

問題①



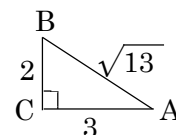
$$\sin A = \frac{7}{25} \quad \cos A = \frac{24}{25} \quad \tan A = \frac{7}{24}$$

例題②



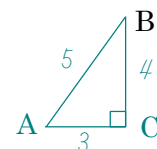
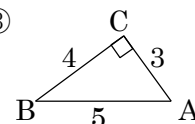
$$\sin A = \frac{\sqrt{11}}{6} \quad \cos A = \frac{5}{6} \quad \tan A = \frac{\sqrt{11}}{5}$$

問題②



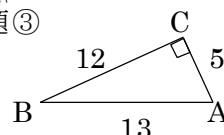
$$\sin A = \frac{2}{\sqrt{13}} \quad \cos A = \frac{3}{\sqrt{13}} \quad \tan A = \frac{2}{3}$$

例題③



$$\sin A = \frac{4}{5} \quad \cos A = \frac{3}{5} \quad \tan A = \frac{4}{3}$$

問題③



$$\sin A = \frac{12}{13} \quad \cos A = \frac{5}{13} \quad \tan A = \frac{12}{5}$$

1. 次の三角比を求めよ。 Find the following trigonometric ratios.

2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

三角比の定義と書き換え

$\sin A = \frac{\text{高さ}}{\text{斜辺}}$ (サイン) , $\cos A = \frac{\text{底辺}}{\text{斜辺}}$ (コサイン) , $\tan A = \frac{\text{高さ}}{\text{底辺}}$ (タンジェント)

※調べる角を左、直角を右にする。

例題①

図1: $\sin A = \frac{\sqrt{3}}{2}$, $\cos A = \frac{1}{2}$, $\tan A = \frac{\sqrt{3}}{1} = \sqrt{3}$

図2: $\sin 60^\circ = \frac{\sqrt{3}}{2}$, $\cos 60^\circ = \frac{1}{2}$, $\tan 60^\circ = \frac{\sqrt{3}}{1} = \sqrt{3}$

問題①

図: $\sin A = \frac{8}{17}$, $\cos A = \frac{15}{17}$, $\tan A = \frac{8}{15}$

例題②

図1: $\sin A = \frac{2}{3}$, $\cos A = \frac{\sqrt{5}}{3}$, $\tan A = \frac{2}{\sqrt{5}}$

図2: $\sin A = \frac{2}{3}$, $\cos A = \frac{\sqrt{5}}{3}$, $\tan A = \frac{2}{\sqrt{5}}$

問題②

図: $\sin A = \frac{1}{\sqrt{5}}$, $\cos A = \frac{2}{\sqrt{5}}$, $\tan A = \frac{1}{2}$

例題③

図1: $\sin A = \frac{4}{5}$, $\cos A = \frac{3}{5}$, $\tan A = \frac{4}{3}$

図2: $\sin A = \frac{4}{5}$, $\cos A = \frac{3}{5}$, $\tan A = \frac{4}{3}$

問題③

図: $\sin A = \frac{8}{17}$, $\cos A = \frac{15}{17}$, $\tan A = \frac{8}{15}$

例題

図: $\sin A = \frac{9}{41}$, $\cos A = \frac{40}{41}$, $\tan A = \frac{9}{40}$

問題①

図: $\sin A = \frac{5}{13}$, $\cos A = \frac{12}{13}$, $\tan A = \frac{5}{12}$

問題②

図: $\sin A = \frac{\sqrt{7}}{4}$, $\cos A = \frac{3}{4}$, $\tan A = \frac{\sqrt{7}}{3}$

問題③

図: $\sin A = \frac{2}{\sqrt{13}}$, $\cos A = \frac{3}{\sqrt{13}}$, $\tan A = \frac{2}{3}$

問題④

図: $\sin 45^\circ = \frac{\sqrt{2}}{2}$, $\cos 45^\circ = \frac{\sqrt{2}}{2}$, $\tan 45^\circ = 1$

数学Ⅰ 三角比 4 課題

()年()組()番()

1. 次の三角比を求めよ。 Find the following trigonometric ratios.

$$\sin A = \frac{\text{高さ}}{\text{斜辺}}, \cos A = \frac{\text{底辺}}{\text{斜辺}}, \tan A = \frac{\text{高さ}}{\text{底辺}}$$

(サイン) (コサイン) (タンジェント)

例題

$\sin A = \frac{5}{13}, \cos A = \frac{12}{13}, \tan A = \frac{5}{12}$

問題①

$\sin A = \frac{8}{17}, \cos A = \frac{15}{17}, \tan A = \frac{8}{15}$

問題②

$\sin A = \frac{\sqrt{5}}{3}, \cos A = \frac{2}{3}, \tan A = \frac{\sqrt{5}}{2}$

問題③

$\sin A = \frac{2}{\sqrt{13}}, \cos A = \frac{3}{\sqrt{13}}, \tan A = \frac{2}{3}$

問題④

$\sin 30^\circ = \frac{1}{2}, \cos 30^\circ = \frac{\sqrt{3}}{2}, \tan 30^\circ = \frac{1}{\sqrt{3}}$

2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

※調べる角を左，直角を右にする。

例題

$\sin 45^\circ = \frac{\sqrt{2}}{2}, \cos 45^\circ = \frac{\sqrt{2}}{2}, \tan 45^\circ = 1$

問題

$\sin A = \frac{1}{\sqrt{2}}, \cos A = \frac{1}{\sqrt{2}}, \tan A = 1$

3. 次の三角比を求めよ。 Find the following trigonometric ratios.

例題	問題
<p>$17^2 = x^2 + 15^2$ $x^2 = 17^2 - 15^2$ $= (17+15)(17-15)$ $= 32 \times 2 = 64$ $x > 0$ より $x = \sqrt{64} = 8$</p> <p>$\sin A = \frac{8}{17}, \cos A = \frac{15}{17}, \tan A = \frac{8}{15}$</p>	<p>$\sin A = \frac{x}{25}, \cos A = \frac{24}{25}, \tan A = \frac{x}{24}$</p>