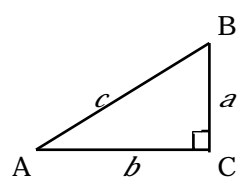


1. 三角比の定義を完成せよ。



[辺] [abc]

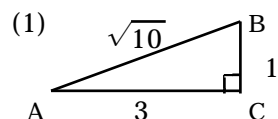
$\sin A = \frac{\text{対辺}}{\text{斜辺}} = \frac{a}{c}$

$\cos A = \frac{\text{隣辺}}{\text{斜辺}} = \frac{b}{c}$

$\tan A = \frac{\text{対辺}}{\text{隣辺}} = \frac{a}{b}$

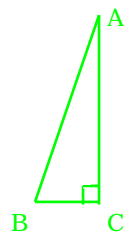
辺
斜辺
高さ(対辺)
底辺(隣辺)

2. 次の三角形の三角比を求めよ。



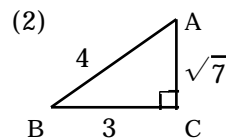
$\sin A = \frac{1}{\sqrt{10}}$ $\cos A = \frac{3}{\sqrt{10}}$

$\tan A = \frac{1}{3}$



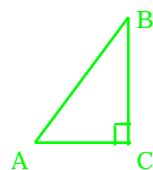
$\sin B = \frac{3}{\sqrt{10}}$ $\cos B = \frac{1}{\sqrt{10}}$

$\tan B = 3$



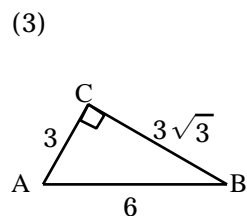
$\sin A = \frac{\sqrt{7}}{4}$ $\cos A = \frac{3}{4}$

$\tan A = \frac{\sqrt{7}}{3}$



$\sin B = \frac{3}{4}$ $\cos B = \frac{\sqrt{7}}{4}$

$\tan B = \frac{3}{\sqrt{7}}$



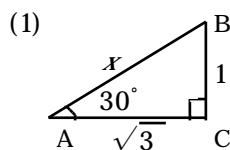
$\sin A = \frac{3\sqrt{3}}{6} = \frac{\sqrt{3}}{2}$ $\cos A = \frac{3}{6} = \frac{1}{2}$

$\tan A = \sqrt{3}$

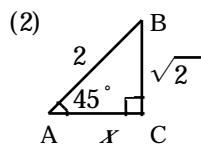
$\sin B = \frac{3}{6} = \frac{1}{2}$ $\cos B = \frac{3\sqrt{3}}{6} = \frac{\sqrt{3}}{2}$

$\tan B = \frac{1}{\sqrt{3}}$

3. 次の三角形の辺と三角比を求めよ。



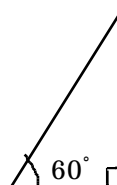
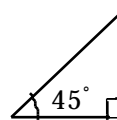
$\sin 30^\circ = \frac{1}{x}$ $\cos 30^\circ = \frac{\sqrt{3}}{x}$ $\tan 30^\circ = \frac{1}{\sqrt{3}}$



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

4. 3の値を利用して、次の三角比の表を完成せよ。

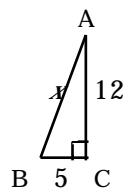
A	30°	45°	60°
$\sin A$	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$
$\cos A$	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$
$\tan A$	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$



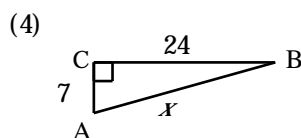
5. 次のピタゴラス数を作成する表を完成せよ。

n (奇数)	$\frac{n^2 - 1}{2}$	$\frac{n^2 + 1}{2}$
3	4	5
5	12	13
7	24	25

6. 次の三角形の A の三角比を求めよ。



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



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