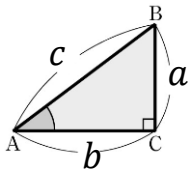
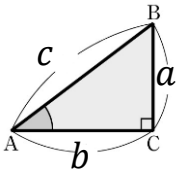
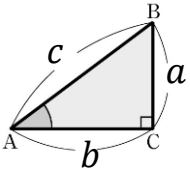
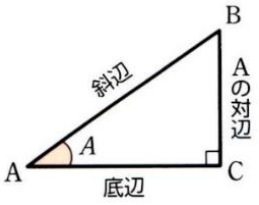
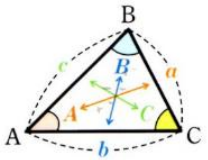
p97◎三角比　　三角比の求め方を見ながら、空らんをうめなさい。

三角比の求め方

サイン	コサイン	タンジェント
		
$\sin A = \frac{a}{c}$	$\cos A = \frac{b}{c}$	$\tan A = \frac{a}{b}$

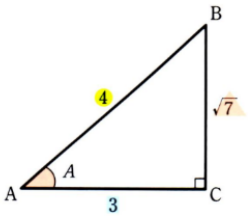




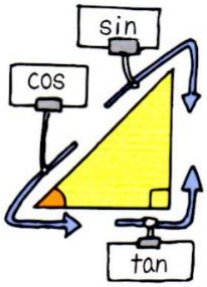
頂点Aの対辺の長さ → a	∠Aの大きさ → A
頂点Bの対辺の長さ → b	∠Bの大きさ → B
頂点Cの対辺の長さ → c	∠Cの大きさ → C

頂点Aと向かいあう辺BCを、
頂点Aの **対辺**（たいへん）
といいます。

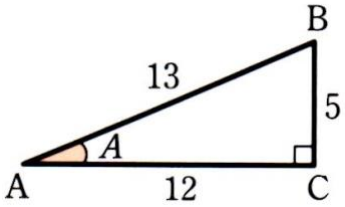
例Ⅰ　図の三角形ABCにおいてなら

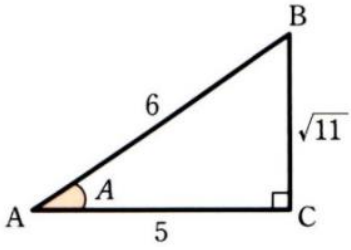


$sinA = \frac{\sqrt{7}}{4}$ ， $cosA = \frac{3}{4}$ ， $tanA = \frac{\sqrt{7}}{3}$



練習Ⅰ　次の直角三角形において，$sinA$, $cosA$, $tanA$　の値を求めなさい





(1)

$sinA =$ ①

$cosA =$ ②

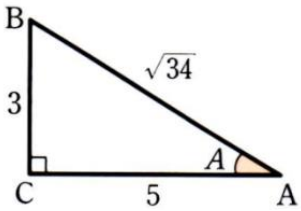
$tanA =$ ③

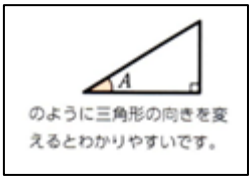
(2)

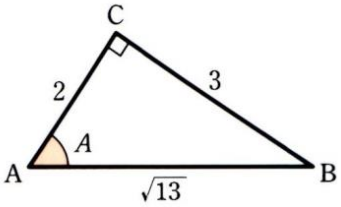
$sinA =$ ④

$cosA =$ ⑤

$tanA =$ ⑥







(3)

$sinA =$ ⑦

$cosA =$ ⑧

$tanA =$ ⑨

(4)

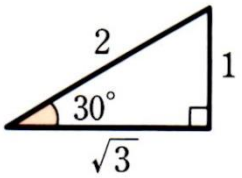
$sinA =$ ⑩

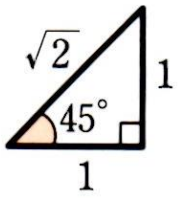
$cosA =$ ⑪

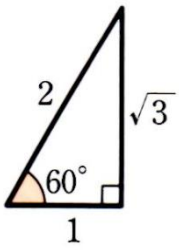
$tanA =$ ⑫

練習2　下の表を完成させなさい。(とても重要)

A	$30°$	$45°$	$60°$
$\sin A$	$\frac{1}{2}$	⑬	⑭
$\cos A$	⑮	$\frac{1}{\sqrt{2}}$	⑯
$\tan A$	⑰	⑱	$\sqrt{3}$







これらの三角比の値はいろいろな場面で使います。

解　答

練習Ⅰ　(1)　① $\frac{5}{13}$　② $\frac{12}{13}$　③ $\frac{5}{12}$　(2)　④ $\frac{\sqrt{11}}{6}$　⑤ $\frac{5}{6}$　⑥ $\frac{\sqrt{11}}{5}$

(3)　⑦ $\frac{3}{\sqrt{34}}$　⑧ $\frac{5}{\sqrt{34}}$　⑨ $\frac{3}{5}$　(4)　⑩ $\frac{3}{\sqrt{13}}$　⑪ $\frac{2}{\sqrt{13}}$　⑫ $\frac{3}{2}$

練習2　⑬ $\frac{1}{\sqrt{2}}$　⑭ $\frac{\sqrt{3}}{2}$　⑮ $\frac{\sqrt{3}}{2}$　⑯ $\frac{1}{2}$　⑰ $\frac{1}{\sqrt{3}}$　⑱ 1