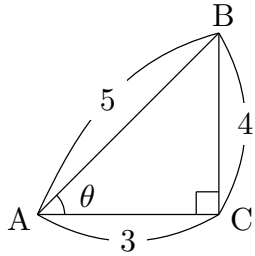


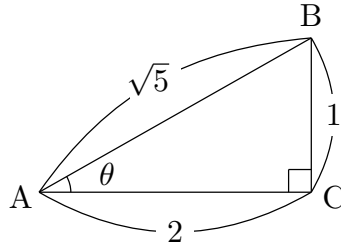
問題

問題 1. 下の図において、 $\sin \theta, \cos \theta, \tan \theta$ の値を、それぞれ求めなさい。

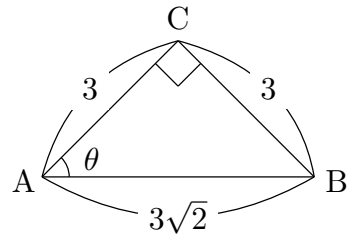
(1)



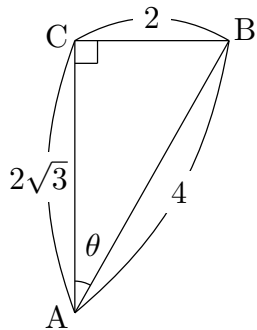
(2)



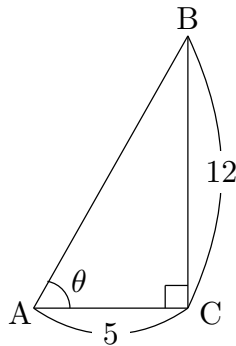
(3)



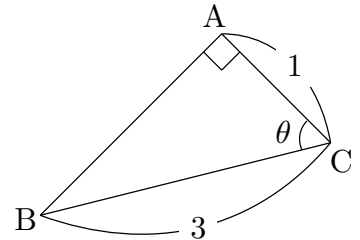
(4)



(5)



(6)

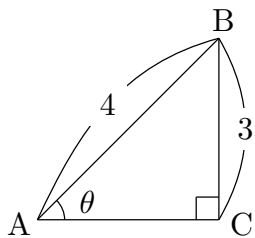


問題 2. 次の値を三角比の表から求めよ。(三角比の表は教科書を見てください。)

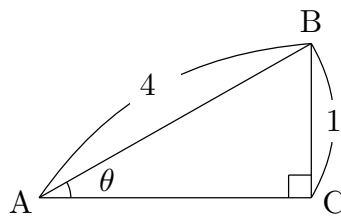
(1) $\sin 15^\circ$ (2) $\sin 41^\circ$ (3) $\cos 76^\circ$ (4) $\cos 13^\circ$ (5) $\tan 56^\circ$ (6) $\tan 80^\circ$

問題 3. 次の図における θ のおよその大きさを、三角比の表から求めよ。(三角比の表は教科書を見てください。)

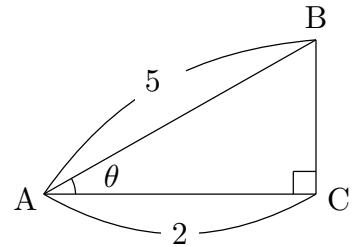
(1)



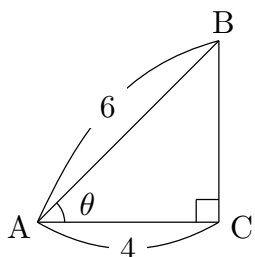
(2)



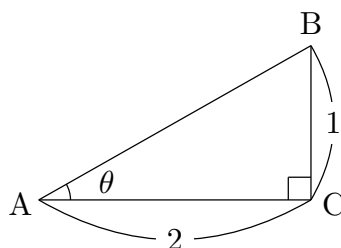
(3)



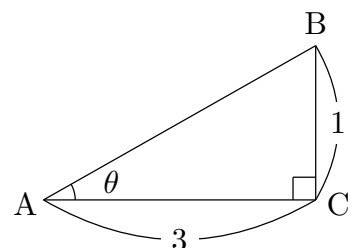
(4)



(5)



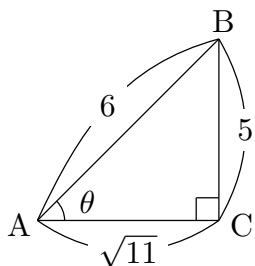
(6)



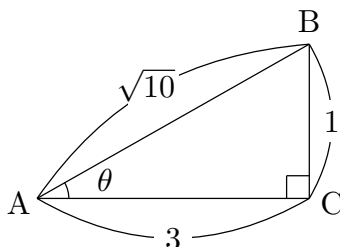
練習

練習 1. 下の図において、 $\sin \theta, \cos \theta, \tan \theta$ の値を、それぞれ求めなさい。

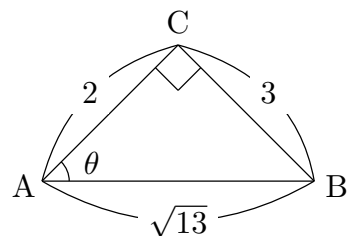
(1)



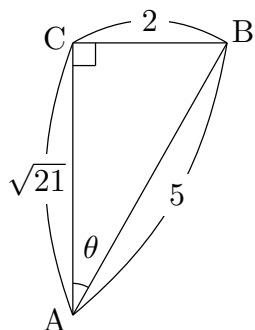
(2)



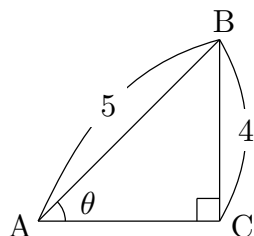
(3)



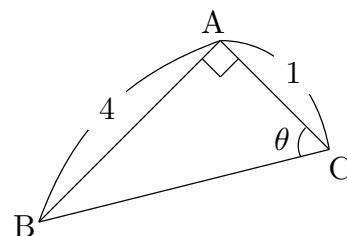
(4)



(5)



(6)

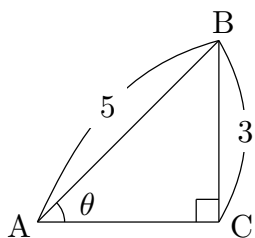


練習 2. 次の値を三角比の表から求めよ。(三角比の表は教科書を見てください。)

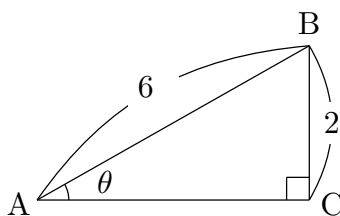
- (1) $\sin 88^\circ$ (2) $\sin 56^\circ$ (3) $\cos 16^\circ$ (4) $\cos 79^\circ$ (5) $\tan 46^\circ$ (6) $\tan 8^\circ$

練習 3. 次の図における θ のおよその大きさを、三角比の表から求めよ。(三角比の表は教科書を見てください。)

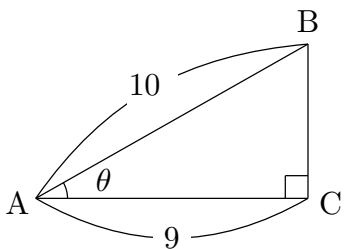
(1)



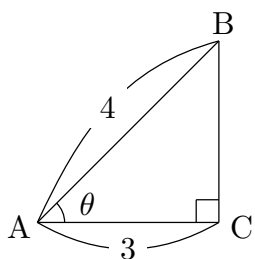
(2)



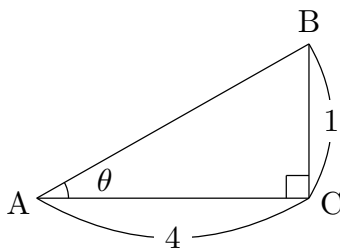
(3)



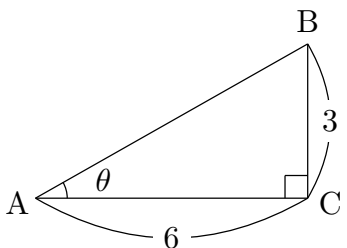
(4)



(5)



(6)



解答

問題 1.

$$(1) \sin \theta = \frac{4}{5}, \cos \theta = \frac{3}{5}, \tan \theta = \frac{4}{3} \quad (2) \sin \theta = \frac{1}{\sqrt{5}}, \cos \theta = \frac{2}{\sqrt{5}}, \tan \theta = \frac{1}{2}$$
$$(3) \sin \theta = \frac{1}{\sqrt{2}}, \cos \theta = \frac{1}{\sqrt{2}}, \tan \theta = 1 \quad (4) \sin \theta = \frac{1}{2}, \cos \theta = \frac{\sqrt{3}}{2}, \tan \theta = \frac{1}{\sqrt{3}}$$
$$(5) \sin \theta = \frac{12}{13}, \cos \theta = \frac{5}{13}, \tan \theta = \frac{12}{5} \quad (6) \sin \theta = \frac{2\sqrt{2}}{3}, \cos \theta = \frac{1}{3}, \tan \theta = 2\sqrt{2}$$

問題 2.

$$(1) 0.2588 \quad (2) 0.6561 \quad (3) 0.2419 \quad (4) 0.9744 \quad (5) 1.4826 \quad (6) 5.6713$$

問題 3.

$$(1) 49^\circ \quad (2) 14^\circ \quad (3) 66^\circ \quad (4) 48^\circ \quad (5) 27^\circ \quad (6) 18^\circ$$

練習 1.

$$(1) \sin \theta = \frac{5}{6}, \cos \theta = \frac{\sqrt{11}}{6}, \tan \theta = \frac{5}{\sqrt{11}} \quad (2) \sin \theta = \frac{1}{\sqrt{10}}, \cos \theta = \frac{3}{\sqrt{10}}, \tan \theta = \frac{1}{3}$$
$$(3) \sin \theta = \frac{3}{\sqrt{13}}, \cos \theta = \frac{2}{\sqrt{13}}, \tan \theta = \frac{3}{2} \quad (4) \sin \theta = \frac{2}{5}, \cos \theta = \frac{\sqrt{21}}{5}, \tan \theta = \frac{2}{\sqrt{21}}$$
$$(5) \sin \theta = \frac{4}{5}, \cos \theta = \frac{3}{5}, \tan \theta = \frac{4}{3} \quad (6) \sin \theta = \frac{4}{\sqrt{17}}, \cos \theta = \frac{1}{\sqrt{17}}, \tan \theta = 4$$

練習 2.

$$(1) 0.9994 \quad (2) 0.8290 \quad (3) 0.9613 \quad (4) 0.1908 \quad (5) 1.0355 \quad (6) 0.1405$$

練習 3.

$$(1) 37^\circ \quad (2) 19^\circ \quad (3) 26^\circ \quad (4) 41^\circ \quad (5) 14^\circ \quad (6) 27^\circ$$