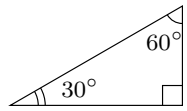
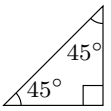
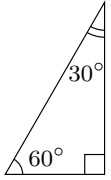
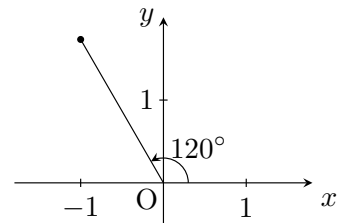


氏名 _____

(復習) 次の直角三角形を用いて、 30° 、 45° 、 60° 、 120° 、 135° 、 150° の \sin 、 \cos 、 \tan の値を求めなさい。

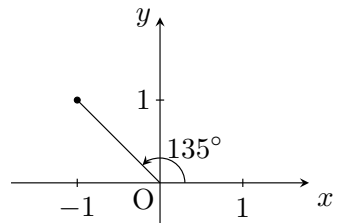
		
$\sin 30^\circ = \square$	$\sin 45^\circ = \square$	$\sin 60^\circ = \square$
$\cos 30^\circ = \square$	$\cos 45^\circ = \square$	$\cos 60^\circ = \square$
$\tan 30^\circ = \square$	$\tan 45^\circ = \square$	$\tan 60^\circ = \square$

■ 120° の三角比



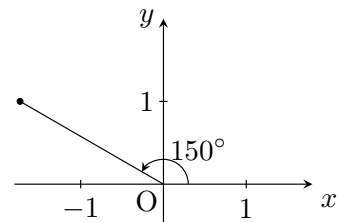
$$\begin{aligned} \sin 120^\circ &= \square \\ \cos 120^\circ &= \square \\ \tan 120^\circ &= \square \end{aligned}$$

■ 135° の三角比



$$\begin{aligned} \sin 135^\circ &= \square \\ \cos 135^\circ &= \square \\ \tan 135^\circ &= \square \end{aligned}$$

■ 150° の三角比



$$\begin{aligned} \sin 150^\circ &= \square \\ \cos 150^\circ &= \square \\ \tan 150^\circ &= \square \end{aligned}$$

■ 正弦定理 (正弦とは \sin のことです)

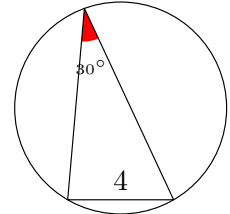
正弦定理を使うと、外接円の半径 R を求めることができる。

$$\frac{\text{角度の向かい側にある辺の長さ}}{\sin \text{角度}} = 2R$$

例題 右の三角形で、 $\triangle ABC$ の外接円の半径 R を求めよ。

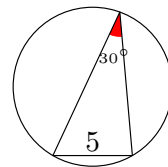
解

$$\begin{aligned} \frac{4}{\sin 30^\circ} &= 2R \\ \frac{1}{\sqrt{2}} \times \frac{4^2}{\sin 30^\circ} &= 2R \times \frac{1}{2} \\ \frac{2}{\sin 30^\circ} &= R \\ 2 \div \sin 30^\circ &= R \\ 2 \div \frac{1}{2} &= R \\ 2 \times \frac{2}{1} &= R \\ \text{答 } 4 &= R \end{aligned}$$

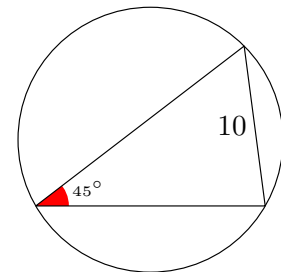


1 次の三角形の外接円の半径 R を求めなさい。

(1)

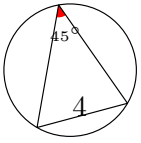


(2)

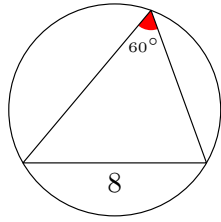


2 次の三角形の外接円の半径 R を求めなさい。

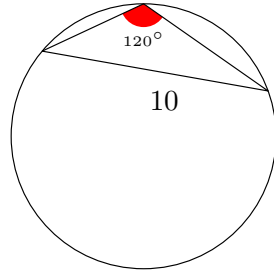
(3)



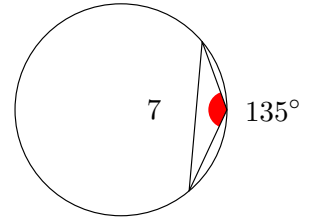
(4)



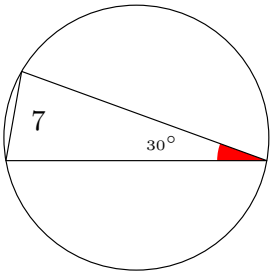
(1)



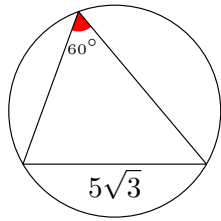
(2)



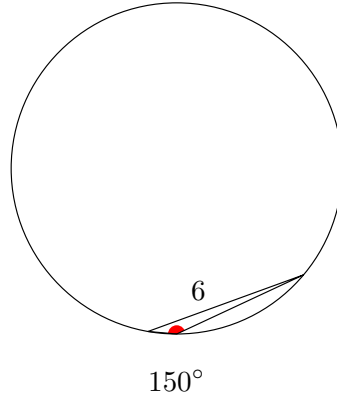
(5)



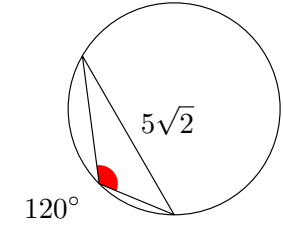
(6)



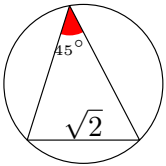
(3)



(4)



(7)



(8)

