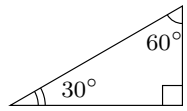
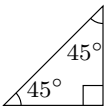
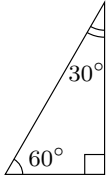
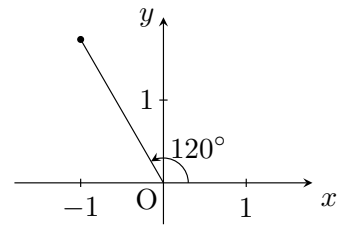


氏名 \_\_\_\_\_

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

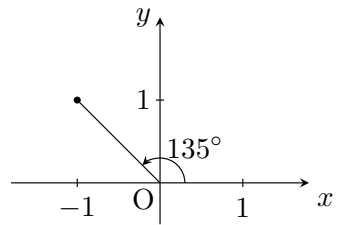
		
$\sin 30^\circ = \square$	$\sin 45^\circ = \square$	$\sin 60^\circ = \square$
$\cos 30^\circ = \square$	$\cos 45^\circ = \square$	$\cos 60^\circ = \square$
$\tan 30^\circ = \square$	$\tan 45^\circ = \square$	$\tan 60^\circ = \square$

■  $120^\circ$  の三角比



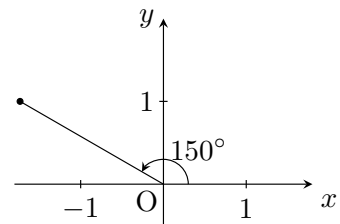
$\sin 120^\circ = \square$   
 $\cos 120^\circ = \square$   
 $\tan 120^\circ = \square$

■  $135^\circ$  の三角比



$\sin 135^\circ = \square$   
 $\cos 135^\circ = \square$   
 $\tan 135^\circ = \square$

■  $150^\circ$  の三角比



$\sin 150^\circ = \square$   
 $\cos 150^\circ = \square$   
 $\tan 150^\circ = \square$

■ 正弦定理 (正弦とは  $\sin$  のことです)

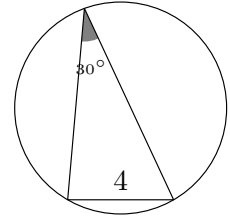
正弦定理を使うと、外接円の半径  $R$  を求めることができる。

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

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

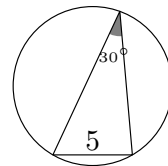
解

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

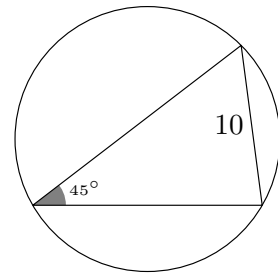


1 次の三角形の外接円の半径  $R$  を求めなさい。

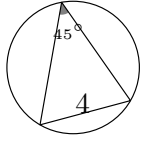
(1)



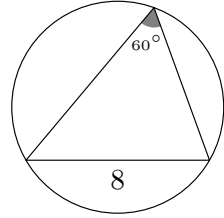
(2)



(3)

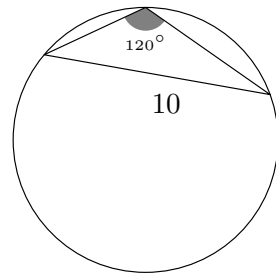


(4)

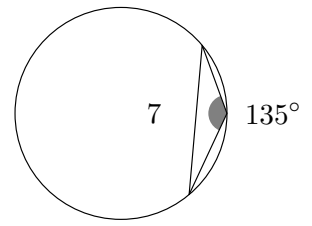


2 次の三角形の外接円の半径  $R$  を求めなさい。

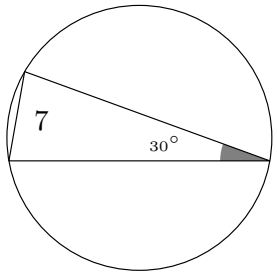
(1)



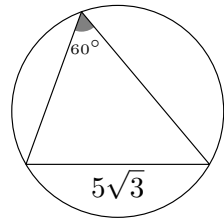
(2)



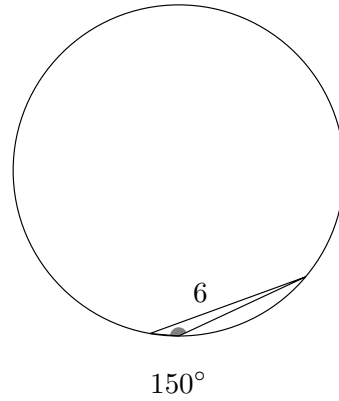
(5)



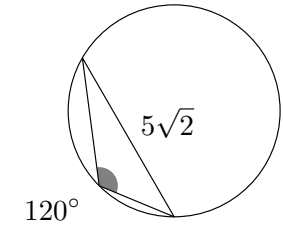
(6)



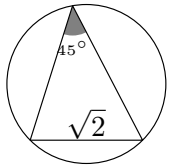
(3)



(4)



(7)



(8)

