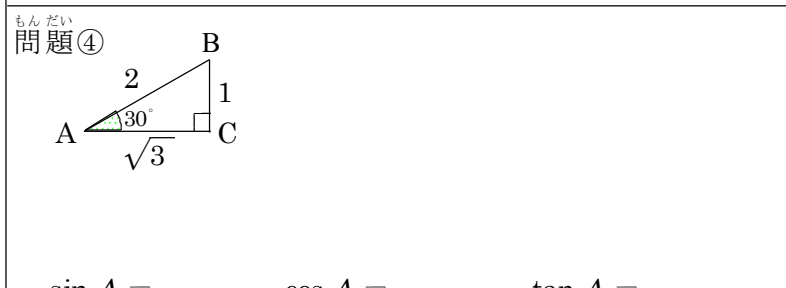
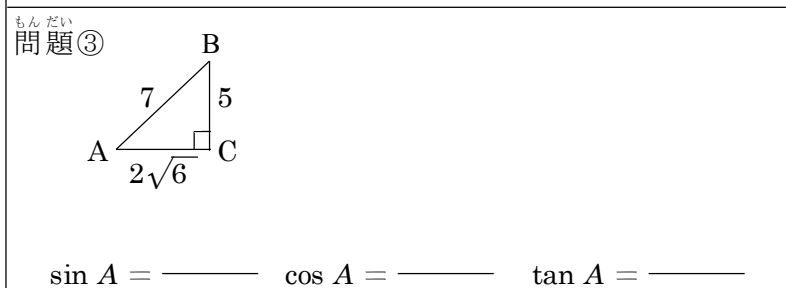
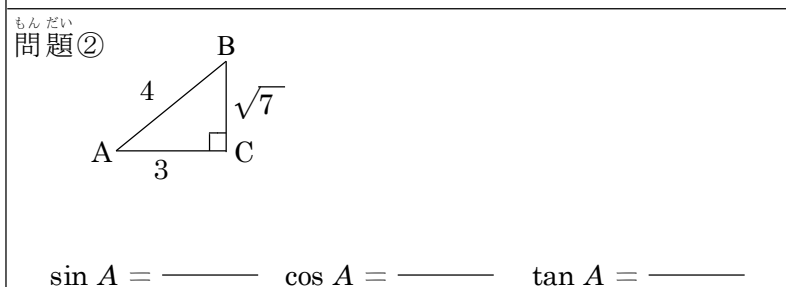
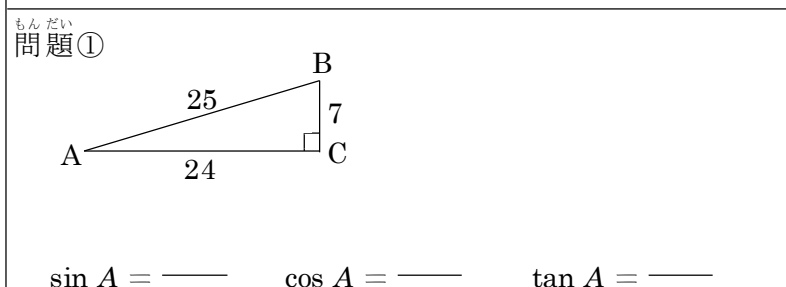
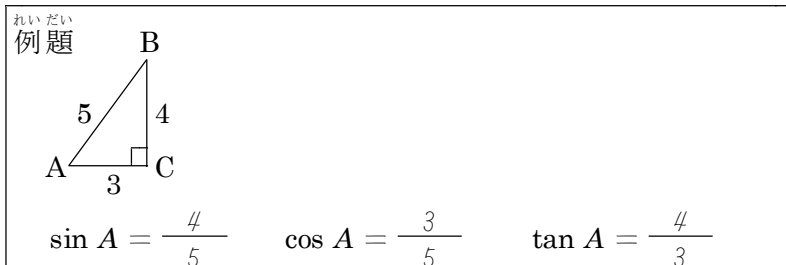
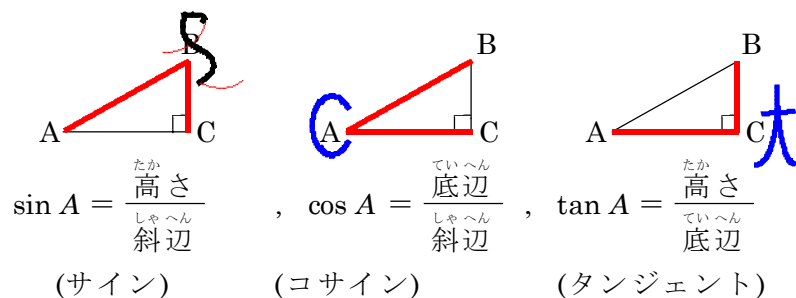


数学Ⅰ 三角比 課題

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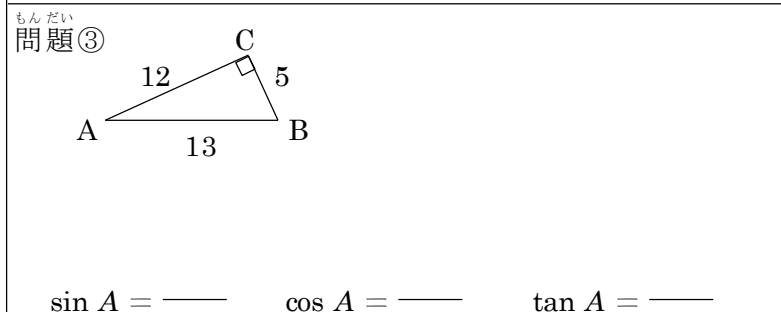
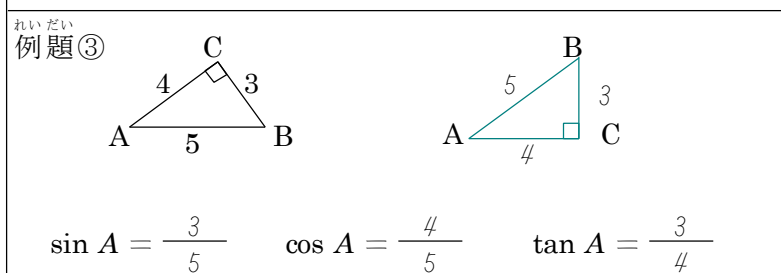
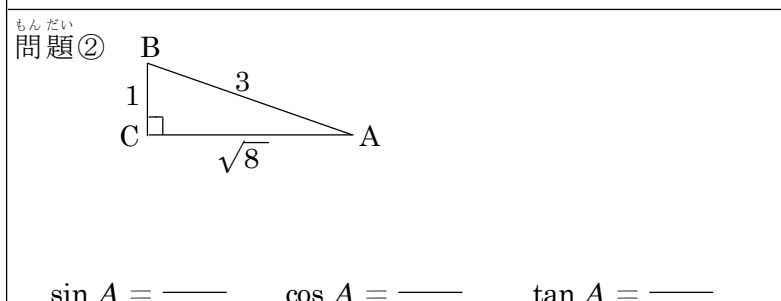
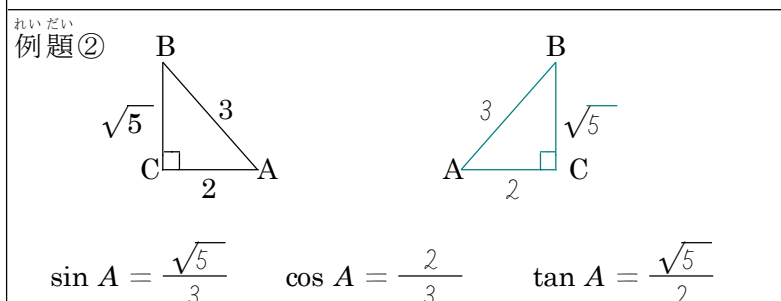
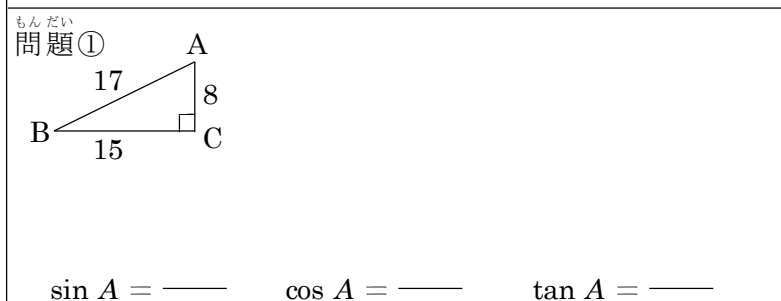
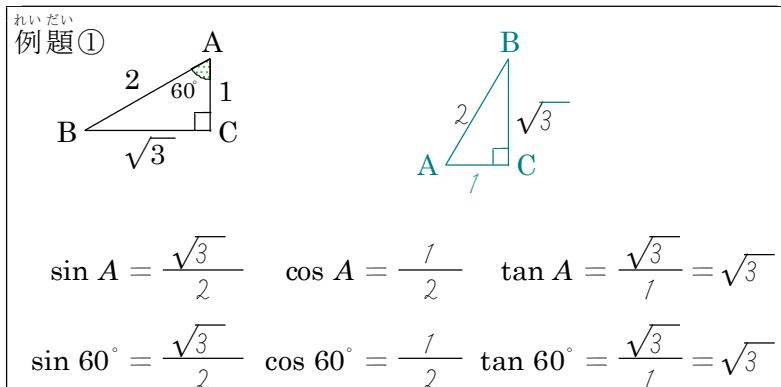
1. 次の三角比を求めよ。 Find the following trigonometric ratios.



$\sin 30^\circ = \text{――}$ $\cos 30^\circ = \text{――}$ $\tan 30^\circ = \text{――}$

2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

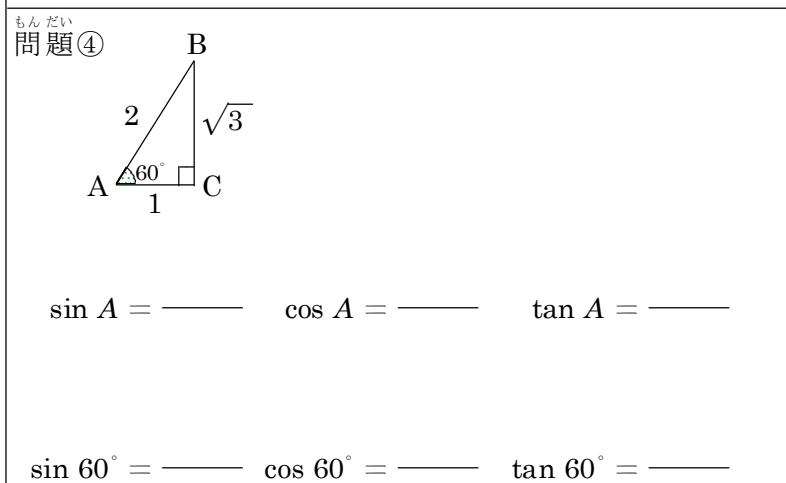
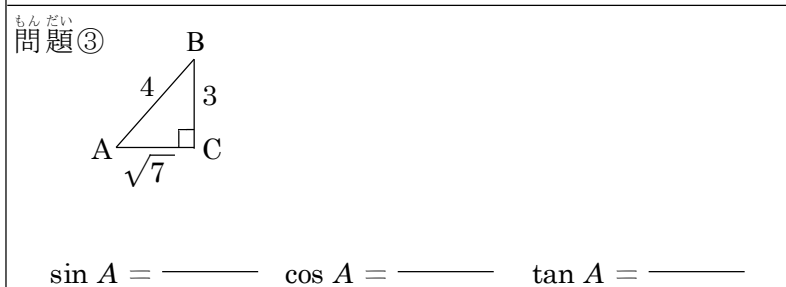
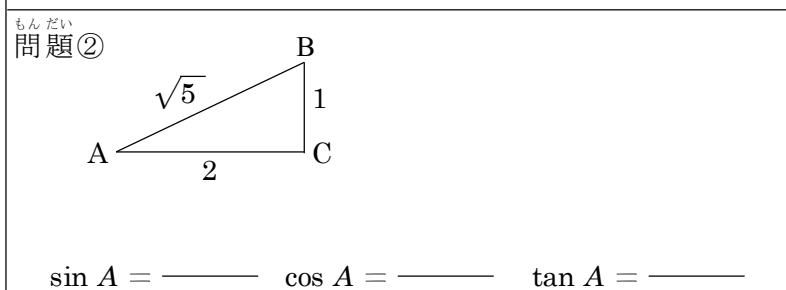
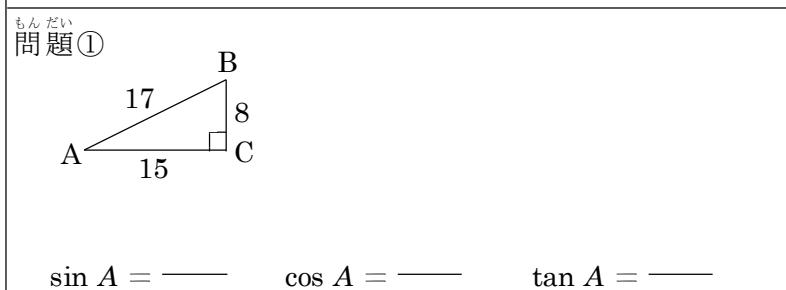
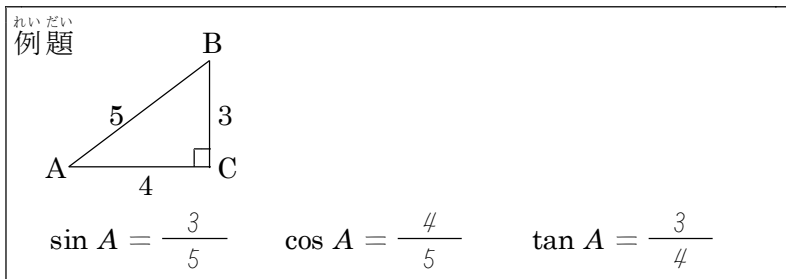
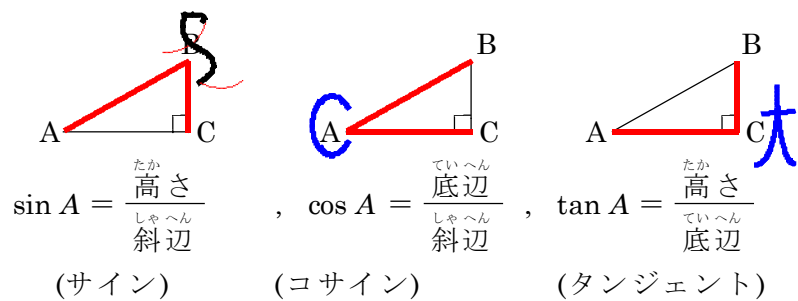
※調べる角を左、直角を右にする。



数学Ⅰ 三角比 2 課題

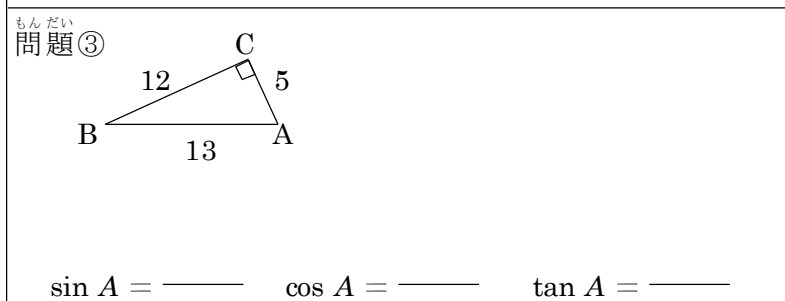
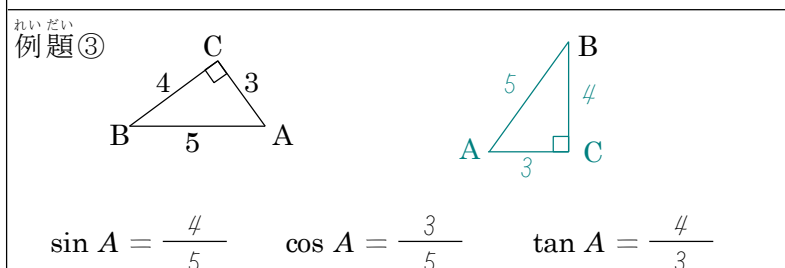
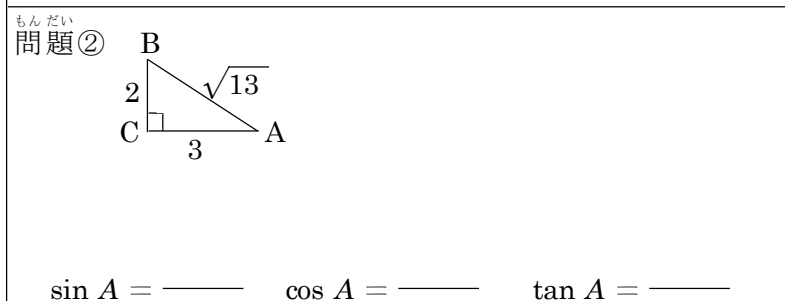
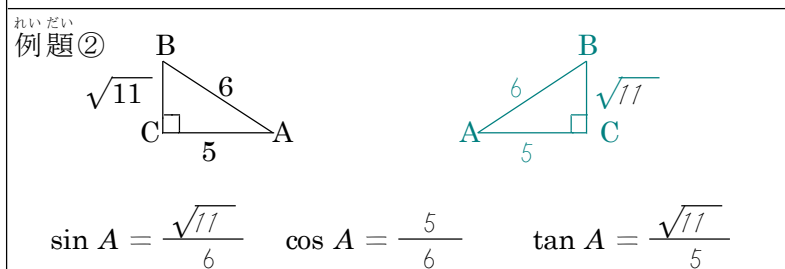
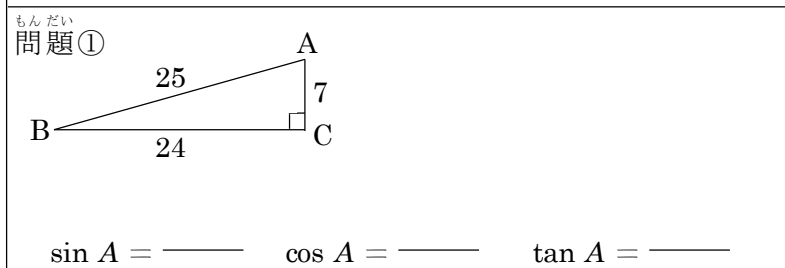
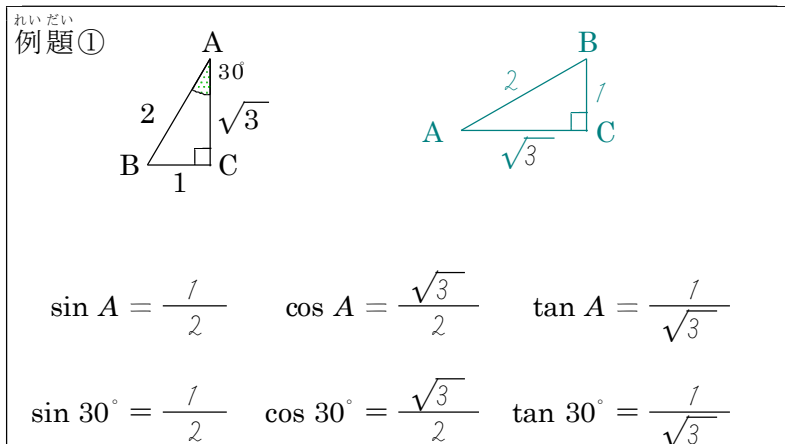
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1. 次の三角比を求めよ。 Find the following trigonometric ratios.



2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

※調べる角を左、直角を右にする。



数学Ⅰ 三角比 3 課題

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1. 次の三角比を求めよ。 Find the following trigonometric ratios.

2. 次の図形を書き換えて、三角比を求めよ。 Rewrite the following figure to find the trigonometric ratios.

Diagram 1: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC (height), the side adjacent is AC (base), and the hypotenuse is AB.

Diagram 2: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC (height), the side adjacent is AC (base), and the hypotenuse is AB.

Diagram 3: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC (height), the side adjacent is AC (base), and the hypotenuse is AB.

$\sin A = \frac{\text{高さ}}{\text{斜辺}}$, $\cos A = \frac{\text{底辺}}{\text{斜辺}}$, $\tan A = \frac{\text{高さ}}{\text{底辺}}$

(サイン) (コサイン) (タンジェント)

※調べる角を左，直角を右にする。

例題①

Diagram 1: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 1, the side adjacent is AC = $\sqrt{3}$, and the hypotenuse is AB = 2. Angle A is 60°.

Diagram 2: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = $\sqrt{3}$, the side adjacent is AC = 1, and the hypotenuse is AB = 2.

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

$\sin 60^\circ = \frac{\sqrt{3}}{2}$ $\cos 60^\circ = \frac{1}{2}$ $\tan 60^\circ = \frac{\sqrt{3}}{1} = \sqrt{3}$

問題①

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 8, the side adjacent is AC = 15, and the hypotenuse is AB = 17.

$\sin A = \frac{8}{17}$ $\cos A = \frac{15}{17}$ $\tan A = \frac{8}{15}$

例題②

Diagram 1: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 2, the side adjacent is AC = $\sqrt{5}$, and the hypotenuse is AB = 3.

Diagram 2: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 2, the side adjacent is AC = $\sqrt{5}$, and the hypotenuse is AB = 3.

$\sin A = \frac{2}{3}$ $\cos A = \frac{\sqrt{5}}{3}$ $\tan A = \frac{2}{\sqrt{5}}$

問題②

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 1, the side adjacent is AC = 2, and the hypotenuse is AB = $\sqrt{5}$.

$\sin A = \frac{1}{\sqrt{5}}$ $\cos A = \frac{2}{\sqrt{5}}$ $\tan A = \frac{1}{2}$

例題③

Diagram 1: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 4, the side adjacent is AC = 3, and the hypotenuse is AB = 5.

Diagram 2: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 4, the side adjacent is AC = 3, and the hypotenuse is AB = 5.

$\sin A = \frac{4}{5}$ $\cos A = \frac{3}{5}$ $\tan A = \frac{4}{3}$

問題③

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 8, the side adjacent is AC = 15, and the hypotenuse is AB = 17.

$\sin A = \frac{8}{17}$ $\cos A = \frac{15}{17}$ $\tan A = \frac{8}{15}$

例題

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 9, the side adjacent is AC = 40, and the hypotenuse is AB = 41.

$\sin A = \frac{9}{41}$ $\cos A = \frac{40}{41}$ $\tan A = \frac{9}{40}$

問題①

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 5, the side adjacent is AC = 12, and the hypotenuse is AB = 13.

$\sin A = \frac{5}{13}$ $\cos A = \frac{12}{13}$ $\tan A = \frac{5}{12}$

問題②

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = $\sqrt{5}$, the side adjacent is AC = 2, and the hypotenuse is AB = 3.

$\sin A = \frac{\sqrt{5}}{3}$ $\cos A = \frac{2}{3}$ $\tan A = \frac{\sqrt{5}}{2}$

問題③

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = 2, the side adjacent is AC = 3, and the hypotenuse is AB = $\sqrt{13}$.

$\sin A = \frac{2}{\sqrt{13}}$ $\cos A = \frac{3}{\sqrt{13}}$ $\tan A = \frac{2}{3}$

問題④

Diagram: Right triangle ABC with right angle at C. Angle A is at vertex A. The side opposite A is BC = $\sqrt{2}$, the side adjacent is AC = $\sqrt{2}$, and the hypotenuse is AB = 2. Angle A is 45°.

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