

問1 次の2次関数のグラフとx軸との共有点の個数を求めよ.

(1)  $y = x^2 + x - 30$

(2)  $y = 2x^2 - 12x + 19$

Ans. \_\_\_\_\_

Ans. \_\_\_\_\_

問2 次の連立不等式を求めよ.

(1)  $\begin{cases} x^2 - 9 < 0 \\ 2x^2 + 4x > 0 \end{cases}$

(2)  $\begin{cases} x^2 - 6x + 5 \leq 0 \\ x^2 - 7x + 12 > 0 \end{cases}$

Ans. \_\_\_\_\_

Ans. \_\_\_\_\_

問3 次の2次不等式を解け.

(1)  $y = x^2 - 5x + 6 \geq 0$

(2)  $y = x^2 - 8x + 16 < 0$

Ans. \_\_\_\_\_

Ans. \_\_\_\_\_

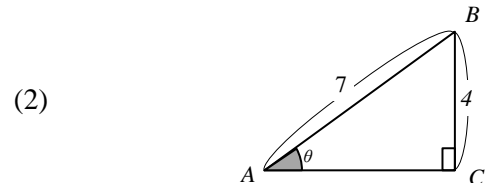
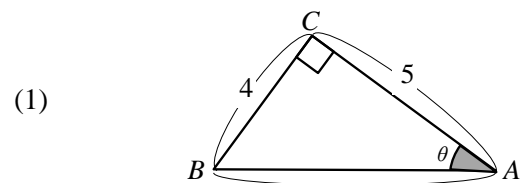
(3)  $y = -2x^2 + 5x - 2 > 0$

(4)  $y = 2x^2 + 4x + 4 > 0$

Ans. \_\_\_\_\_

Ans. \_\_\_\_\_

問4 直角三角形ABCで、 $\sin \theta, \cos \theta, \tan \theta$ を求めよ.



$\sin \theta =$        $\cos \theta =$        $\tan \theta =$

$\sin \theta =$        $\cos \theta =$        $\tan \theta =$

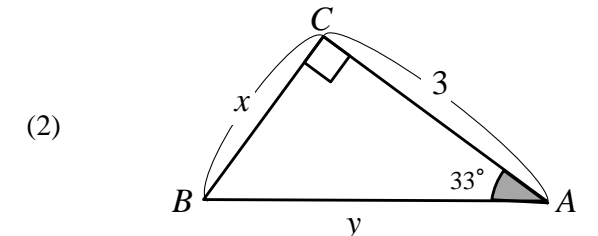
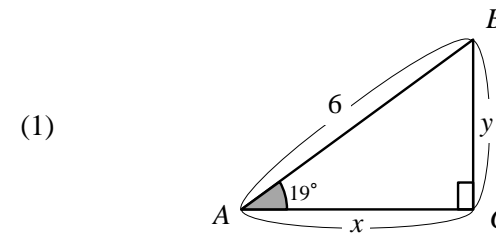
問5 特別な角度の表を埋めなさい.

$\theta$	$0^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$90^\circ$	$120^\circ$	$135^\circ$	$150^\circ$	$180^\circ$
$\sin \theta$									
$\cos \theta$									
$\tan \theta$									

$\theta$	$210^\circ$	$225^\circ$	$240^\circ$	$270^\circ$	$300^\circ$	$315^\circ$	$330^\circ$
$\sin \theta$							
$\cos \theta$							
$\tan \theta$							

問5 次の表を元に  $x, y$  の値を小数第1位まで求めよ.

$\theta$	sin	cos	tan	$\theta$	sin	cos	tan
$19^\circ$	0.3256	0.9455	0.3443	$33^\circ$	0.5446	0.8387	0.6494



$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_       $x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

問6 次の問いに答えよ.

(1)  $\theta$ が鋭角のとき、 $\cos \theta = \frac{2\sqrt{3}}{5}$ のとき、 $\sin \theta, \tan \theta$ を求めよ.

Ans.  $\sin \theta$  \_\_\_\_\_,  $\tan \theta$  \_\_\_\_\_