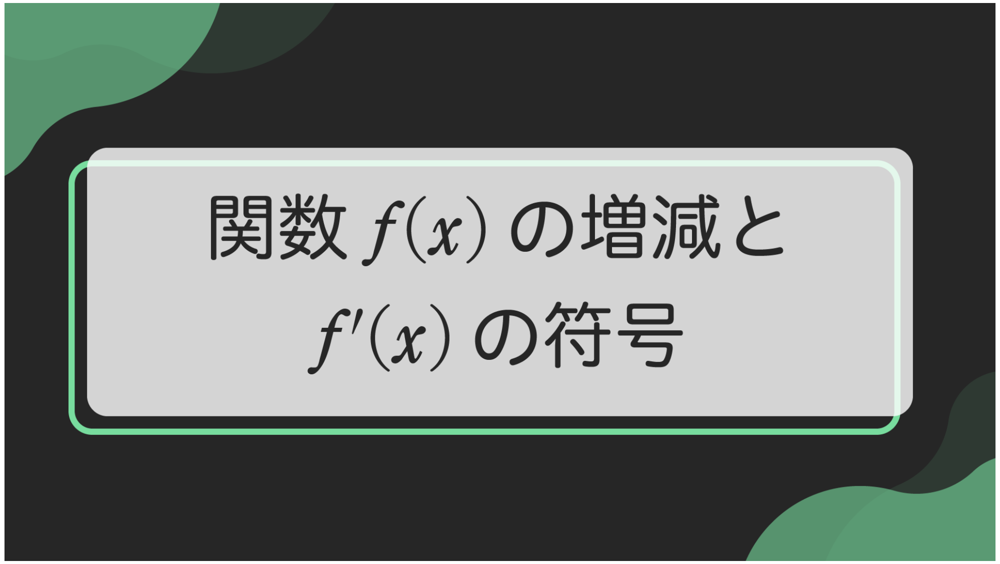
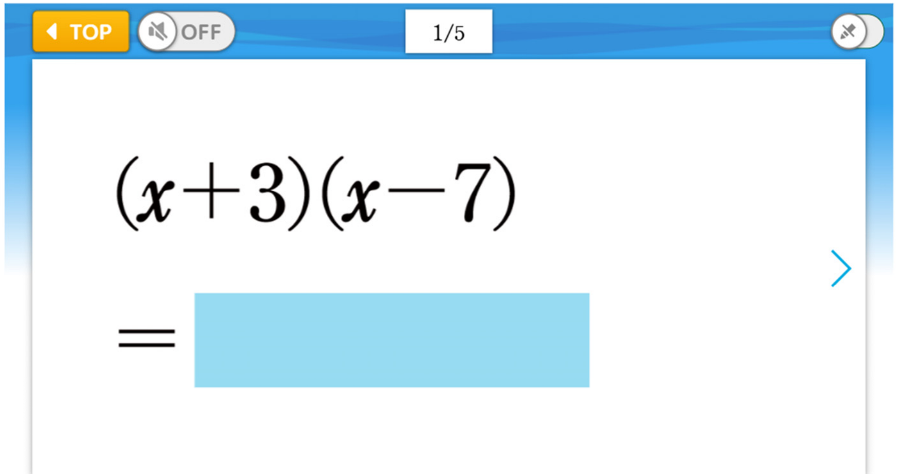
別紙 21

別紙 22

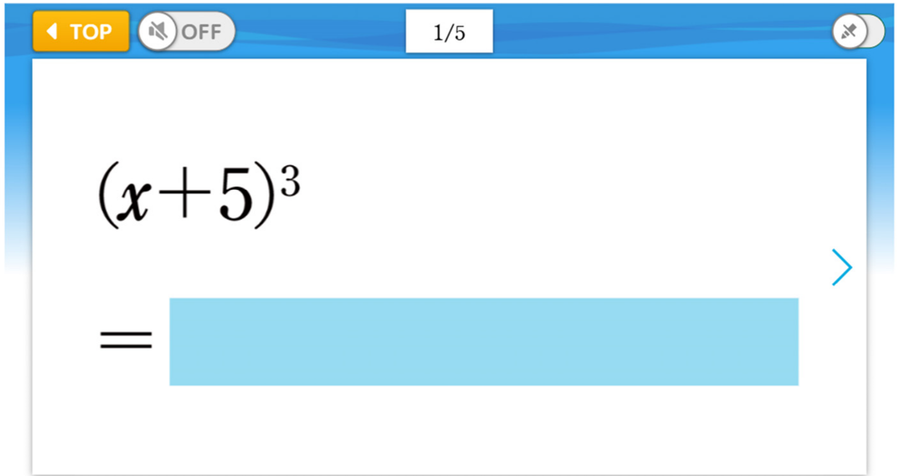


別紙 23

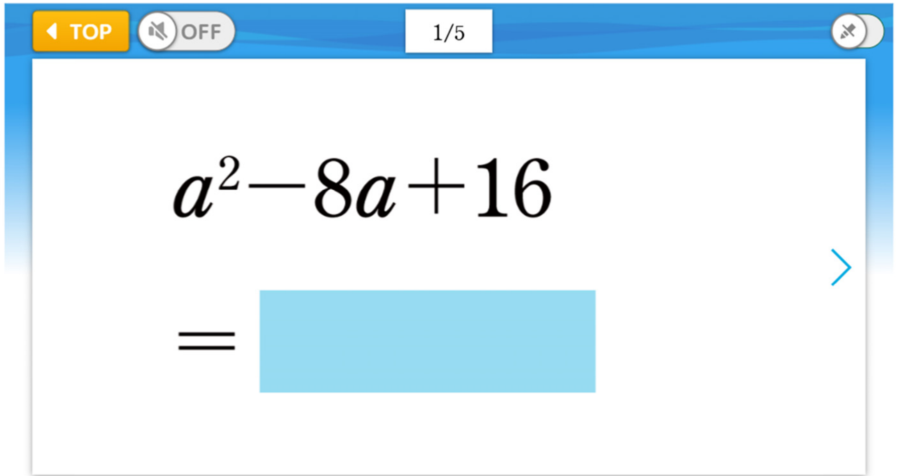
別紙 24



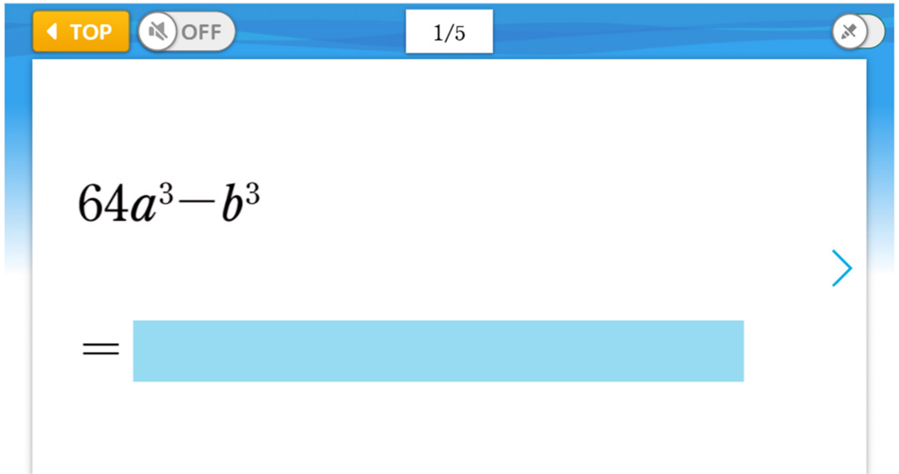
別紙 25



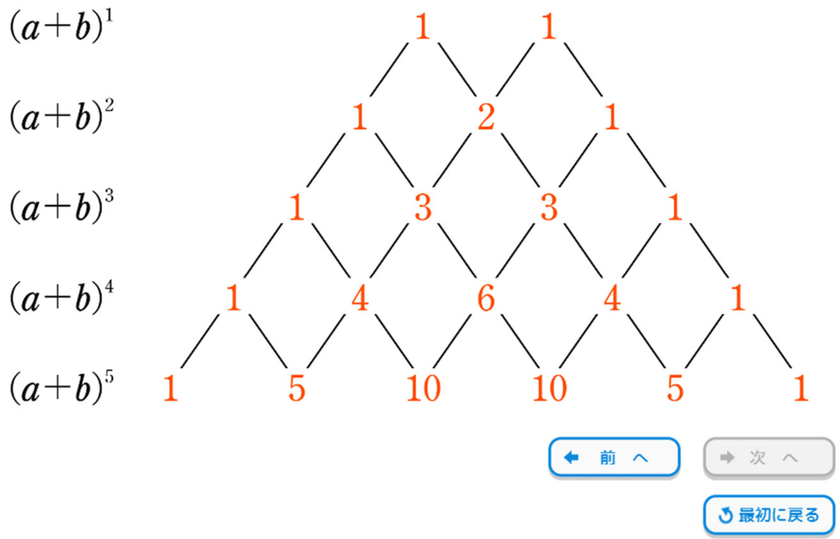
別紙 26



別紙 27



別紙 28



別紙 29

TOP OFF 1/5

$${}_{30}C_2 = \boxed{}$$

別紙 30

TOP OFF 1/5

$(2x-1)^5$ の展開式における

x^3 の係数は $\boxed{}$

別紙 31

TOP OFF 1/5

$(a+b+c)^5$ の展開式における

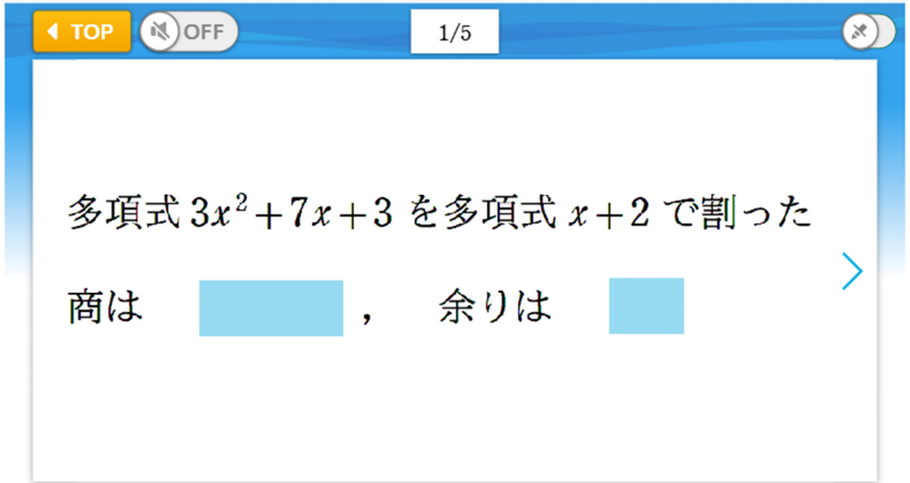
a^2b^2c の係数は $\boxed{}$

別紙 32

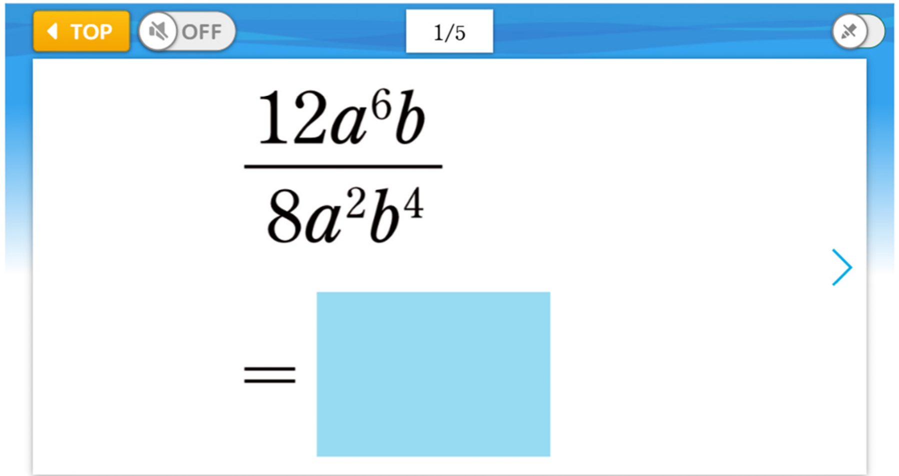
多項式の割り算

$$
\begin{array}{r r l}
 & & x \;\; +3 \\
\cline{3-3}
x+2 & \big) & x^2+5x+8 \\
\times x & & x^2+2x \\
\cline{3-3}
 & & \quad\;\; 3x+8 \\
\times 3 & & \quad\;\; 3x+6 \\
\cline{3-3}
 & & \qquad\quad\;\; 2
\end{array}
$$

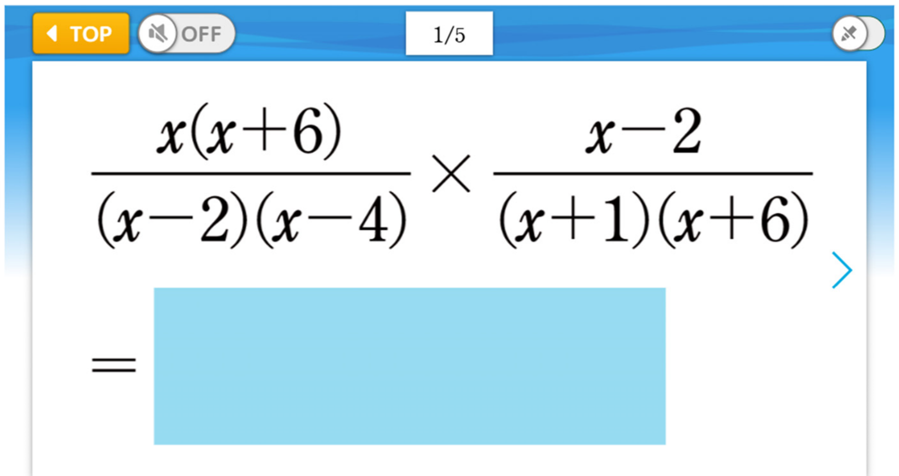
別紙 33



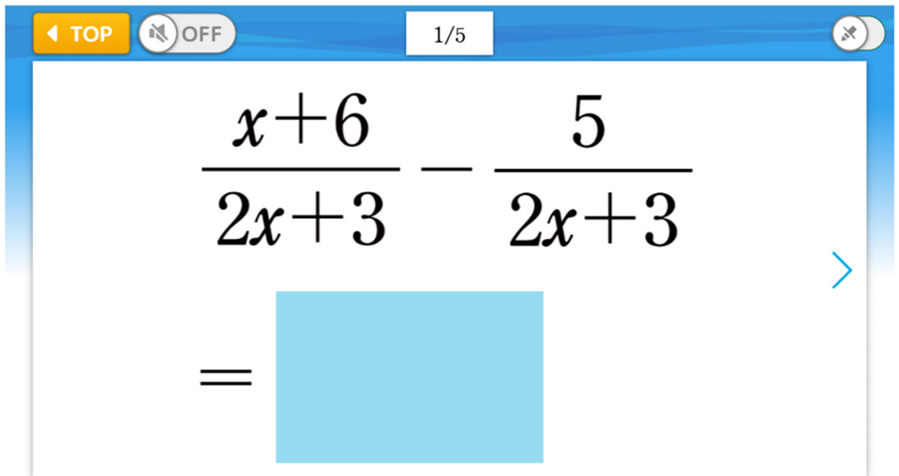
別紙 34



別紙 35



別紙 36



別紙 37

TOP OFF 1/5

$$\frac{1}{x-1}+\frac{1}{x-2}$$

$$=\boxed{}$$

別紙 38

TOP OFF 1/5

$x^2+4x+1=a(x+1)^2+b(x+1)+c$ が

x についての恒等式であるとき

$a=\boxed{}$， $b=\boxed{}$， $c=\boxed{}$

別紙 39

用語の解説

「等号が成り立つ」

別紙 40

TOP OFF 1/5

4 と 16 の　相加平均は $\boxed{}$

相乗平均は $\boxed{}$

別紙 41

相加平均 $\dfrac{a+b}{2} = \dfrac{2+18}{2} = 10$

$\vee$

相乗平均 $\sqrt{ab} = \sqrt{2\cdot 18} = 6$

$a=\ 2$　　　$b=\ 18$

最初に戻る

別紙 42

別紙 43

TOP　OFF　1/5

等式 $(x+4)+(y-1)i=0$ を満たす
実数 x, y の値は

$x=$ ☐, $y=$ ☐

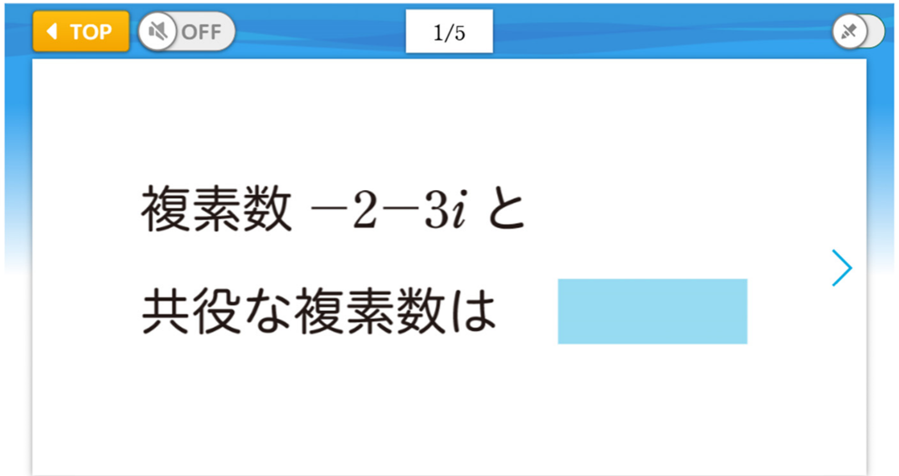
別紙 44

TOP　OFF　1/5

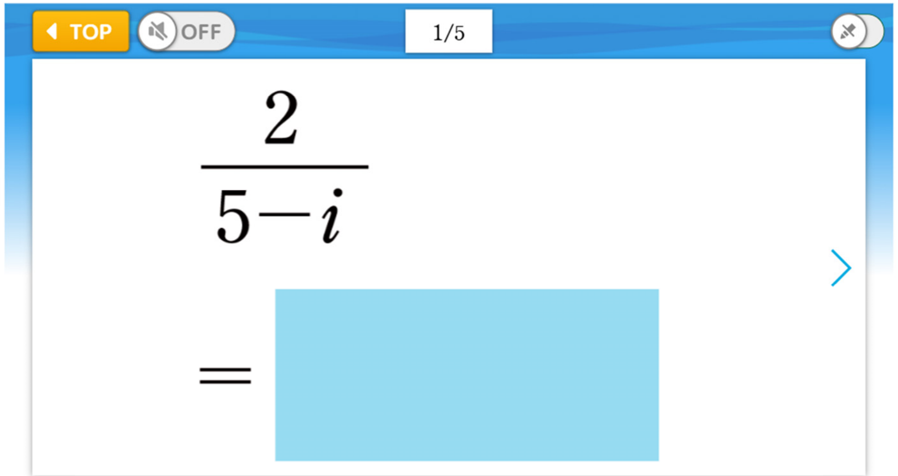
$(1+6i)+(-5+3i)$

$=$ ☐

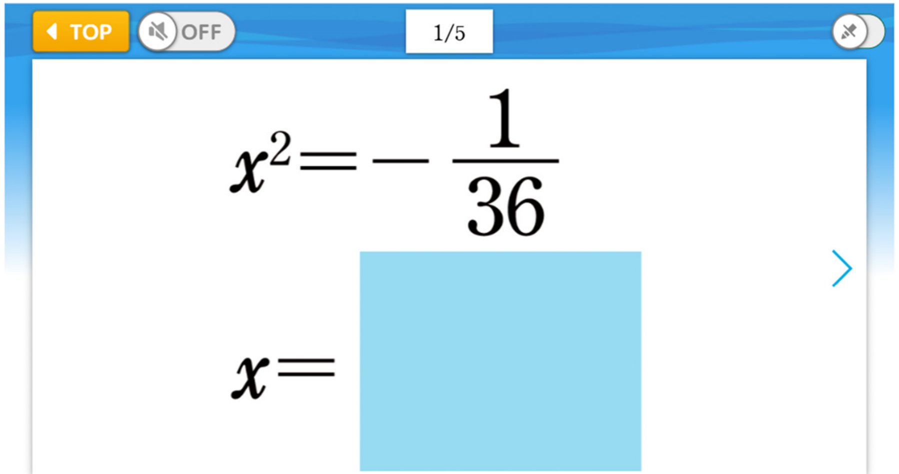
別紙 45



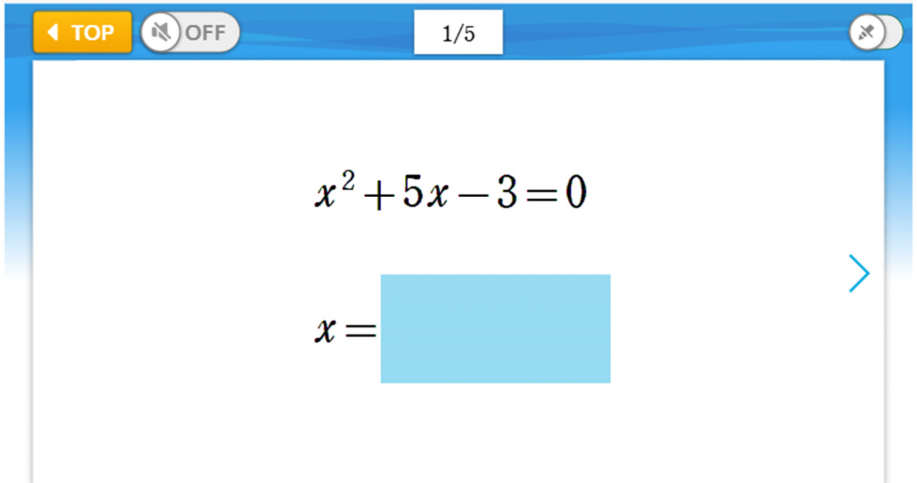
別紙 46



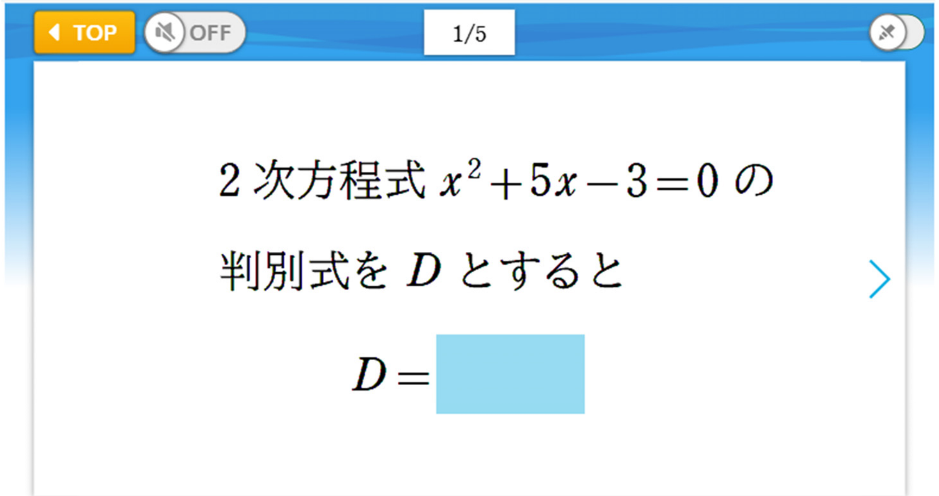
別紙 47



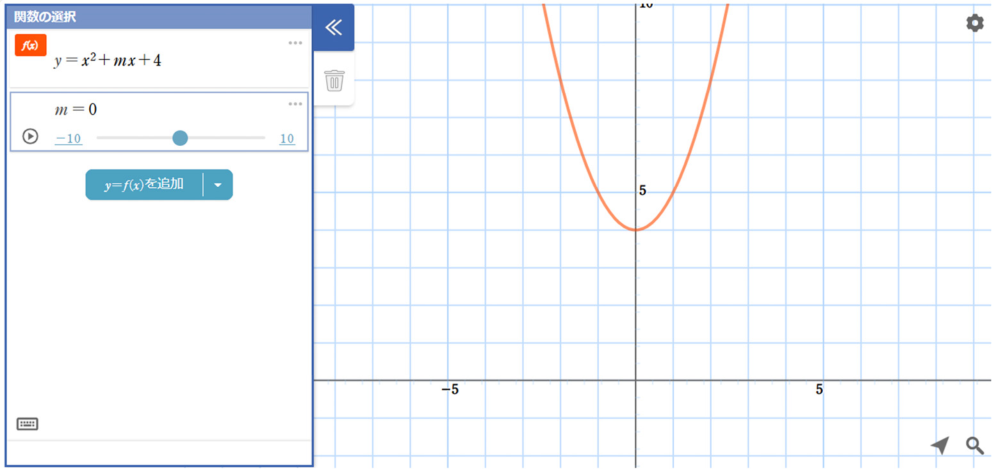
別紙 48



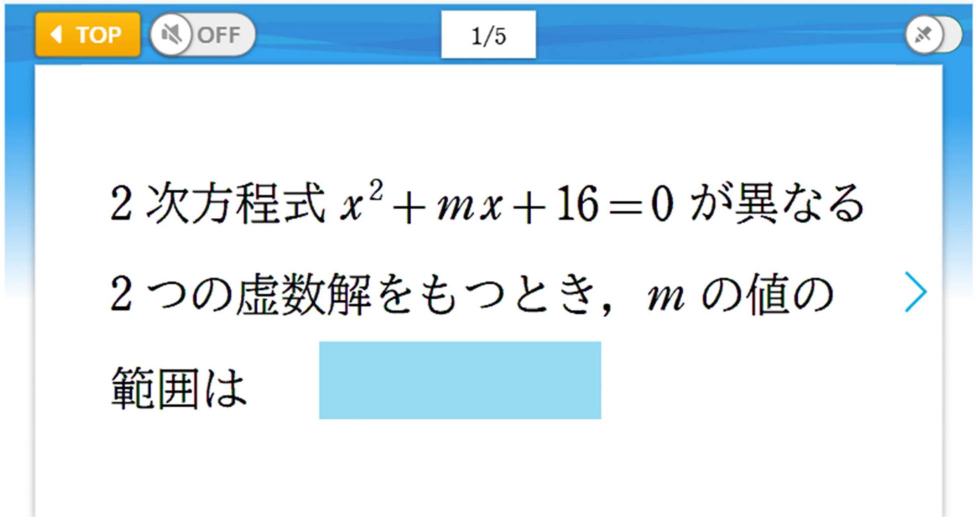
別紙 49



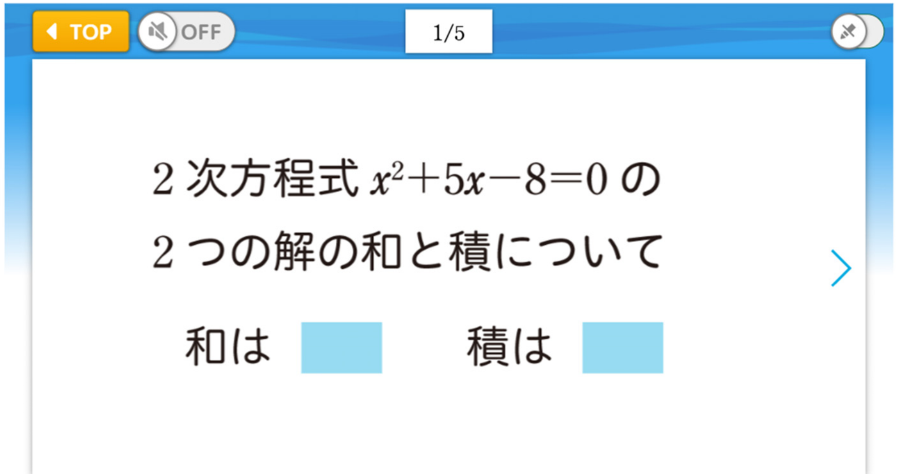
別紙 50



別紙 51



別紙 52



別紙 53

TOP OFF 1/5

-2，-3 を解とする 2 次方程式の 1 つは

$$x^2+\square x+\square=0$$

別紙 54

TOP OFF 1/5

多項式 $3x^3+5x-2$ を，

1 次式 $x-1$ で割った余りは $\square$

別紙 55

TOP OFF 1/5

x^3+x^2-5x+3 を因数定理を用いて

因数分解すると $\square$

別紙 56

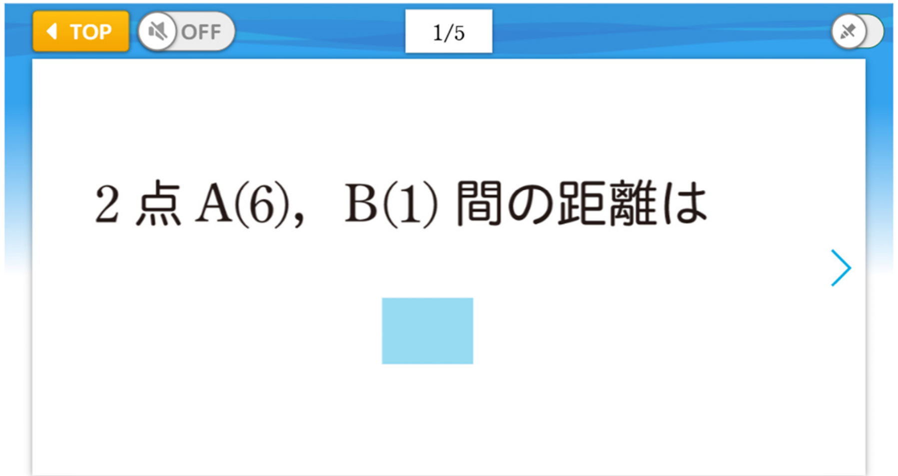
TOP OFF 1/5

$x^3+8x^2+17x+10=0$ を因数定理を用いて

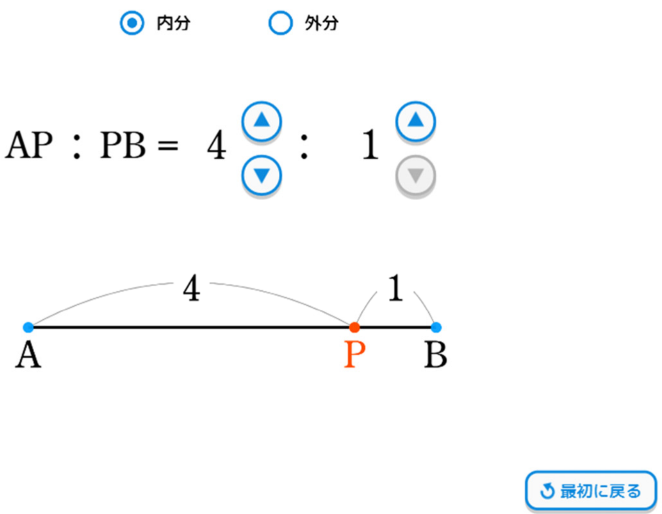
解くと　$x=\square,\ \square,\ \square$

別紙 57

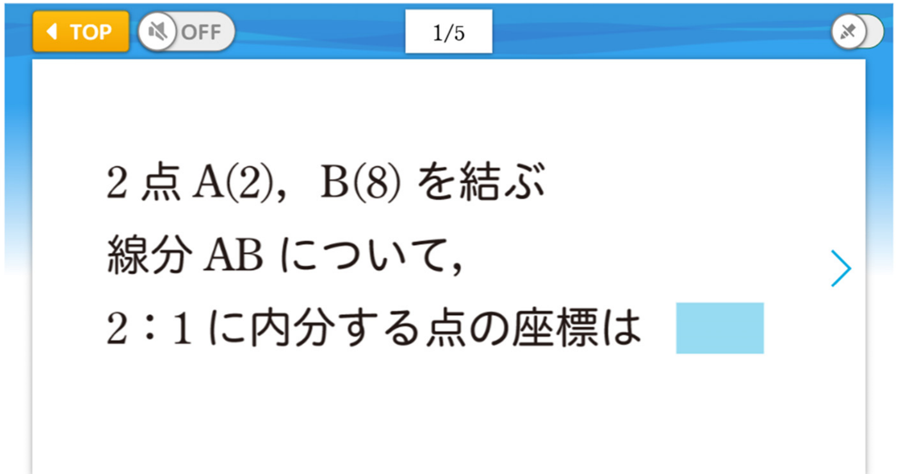
別紙 58



別紙 59



別紙 60



別紙 61

TOP OFF 1/5

点 (−3, 4) は　第　象限の点

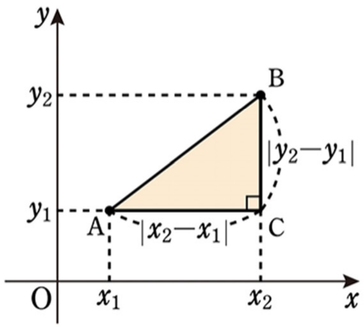
別紙 62

TOP OFF 1/5

点 (−6, 3) に対して，原点に関して
対称な点の座標は　(　,　)

別紙 63

2 点 A(x_1, y_1),B(x_2, y_2) 間の距離 AB を求める



三平方の定理により

$AB^2 = AC^2 + BC^2$

$$AB = \sqrt{AC^2 + BC^2}$$
$$= \sqrt{|x_2 - x_1|^2 + |y_2 - y_1|^2}$$
$$= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

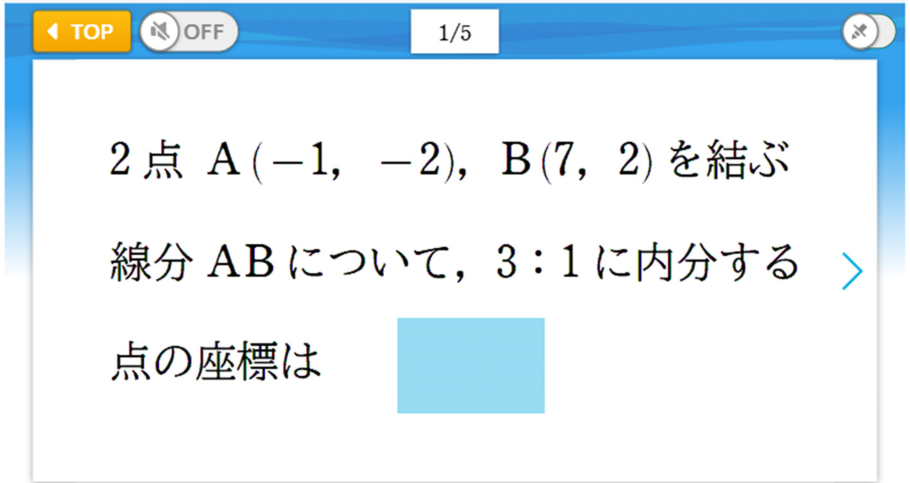
$\boxed{|a|^2 = a^2}$

別紙 64

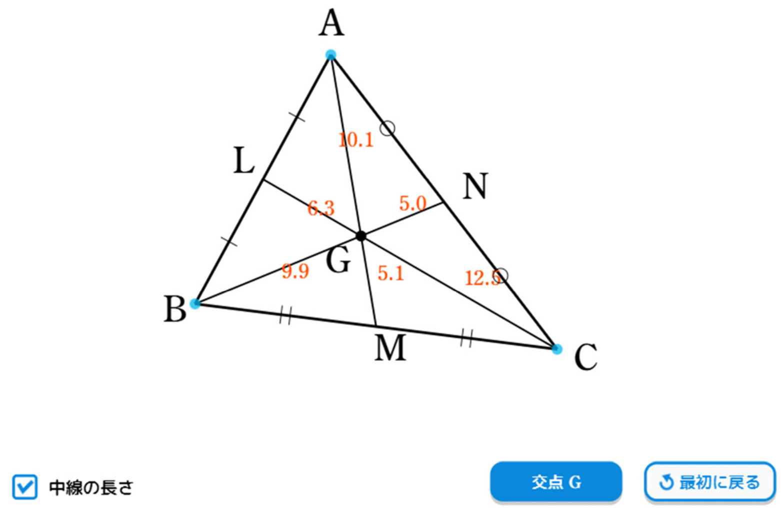
TOP OFF 1/5

原点 O，点 A(−2, 4) 間の距離は

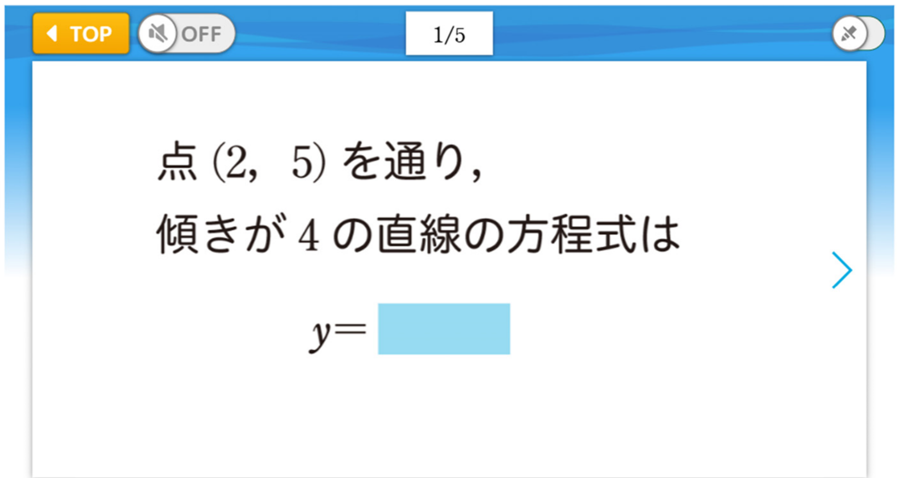
別紙 65



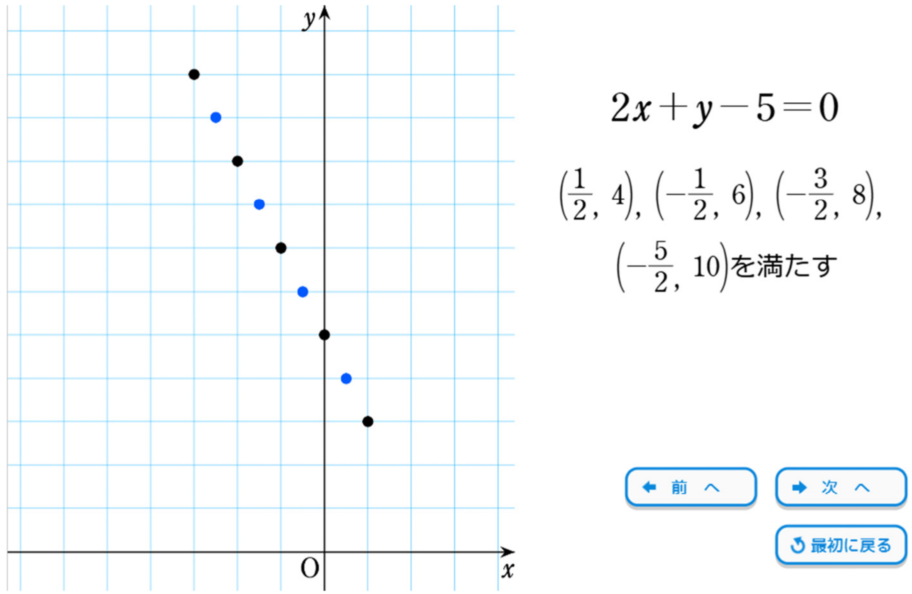
別紙 66



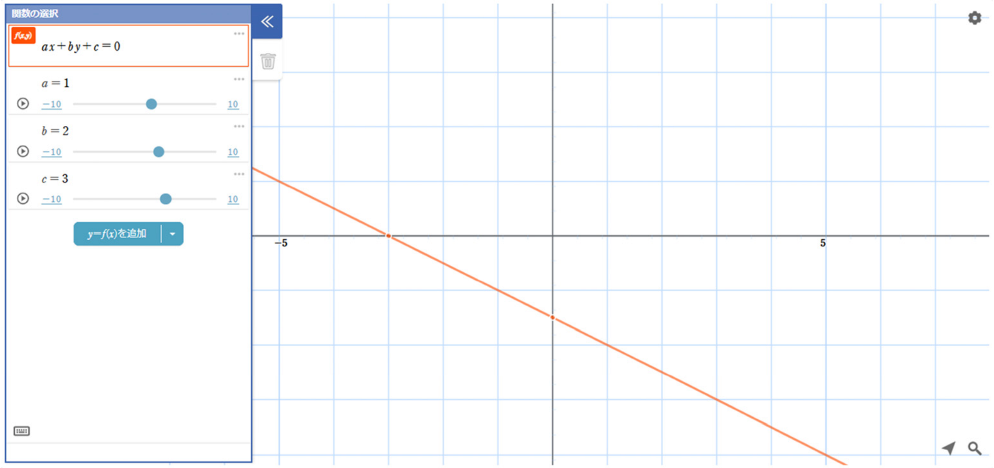
別紙 67



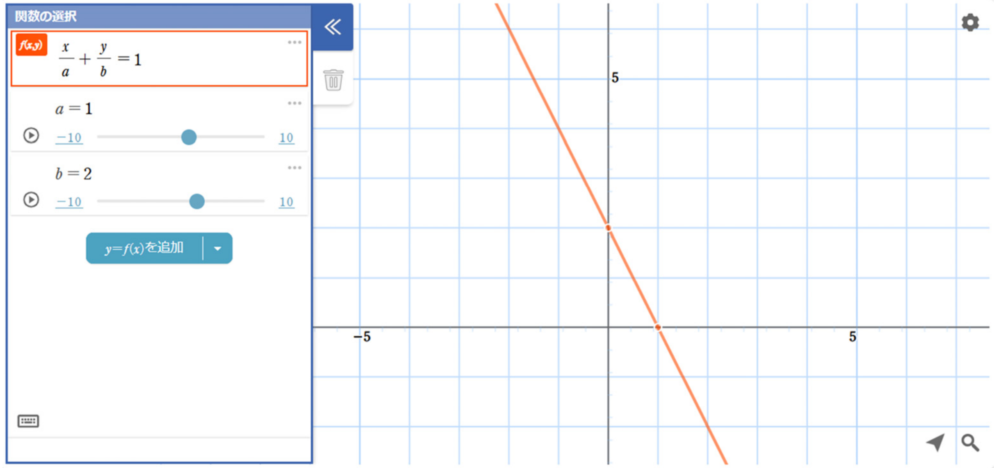
別紙 68



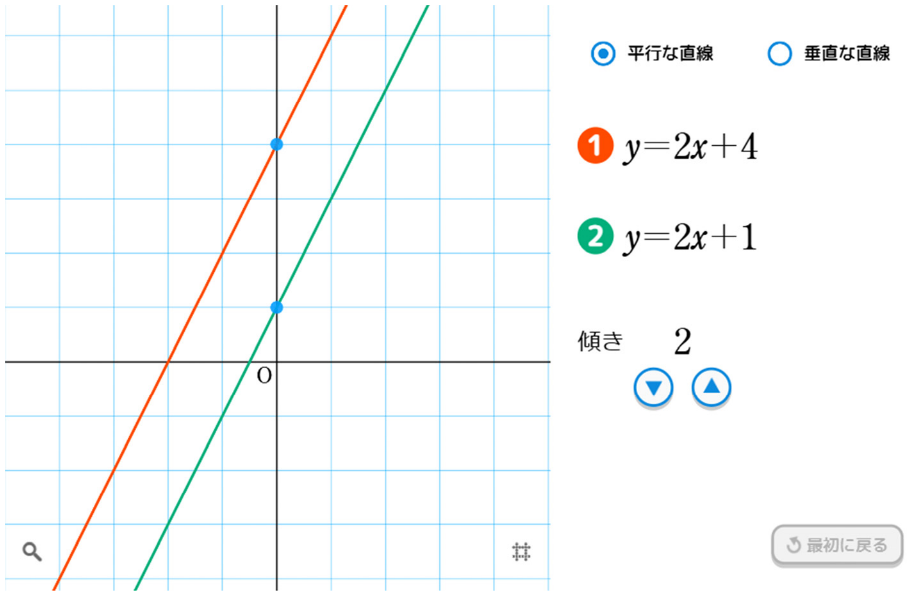
別紙 69



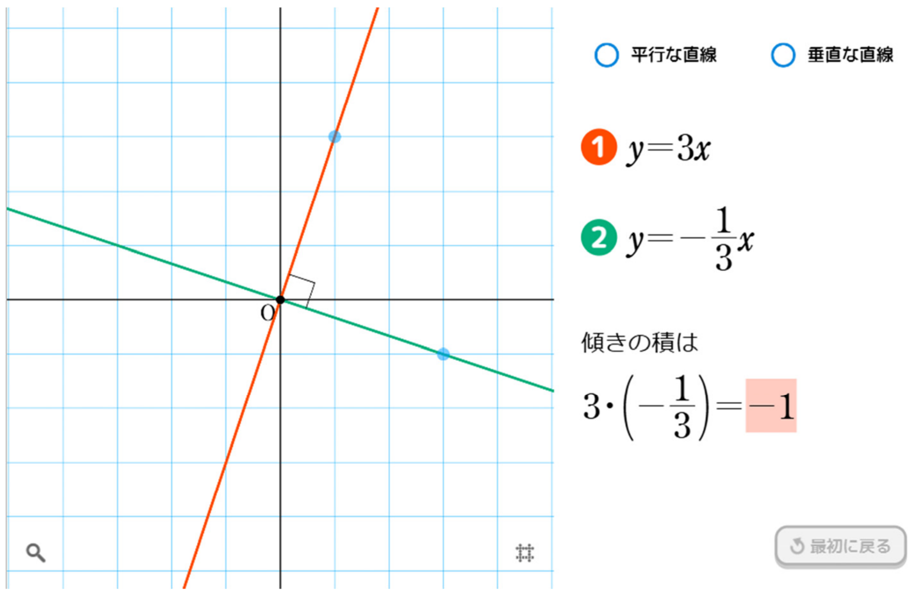
別紙 70



別紙 71



別紙 72



別紙 73

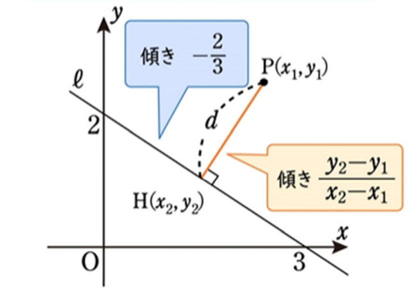
用語の解説

「距離」

別紙 74

点 $P(x_1, y_1)$ と直線 $\ell : 2x+3y-6=0$ の距離 d を求める

Step.1　距離 d を，新たな文字 k を含む式で表す



$$d=\mathrm{PH}=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$$

直線 ℓ と直線 PH は垂直であるから

$$\left(-\frac{2}{3}\right)\cdot\frac{y_2-y_1}{x_2-x_1}=-1$$

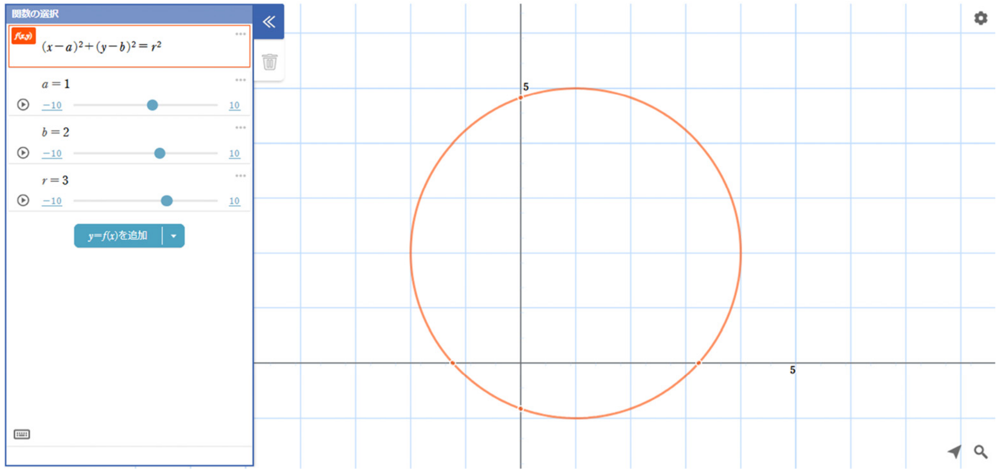
$\dfrac{x_2-x_1}{2}=\dfrac{y_2-y_1}{3}=k$　とおくと

$x_2-x_1=2k$，　$y_2-y_1=3k$

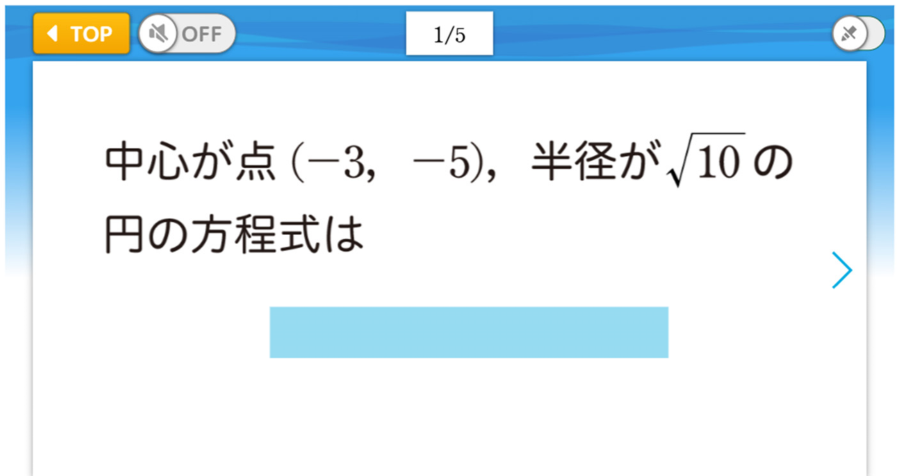
したがって

$$\begin{aligned} d&=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2} \\ &=\sqrt{(2k)^2+(3k)^2} \\ &=\sqrt{2^2+3^2}\,|k| \end{aligned}$$

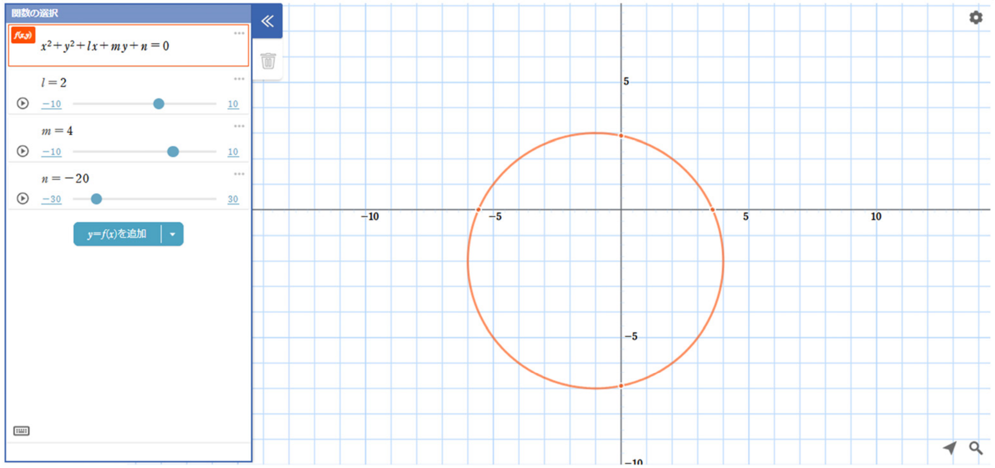
別紙 75



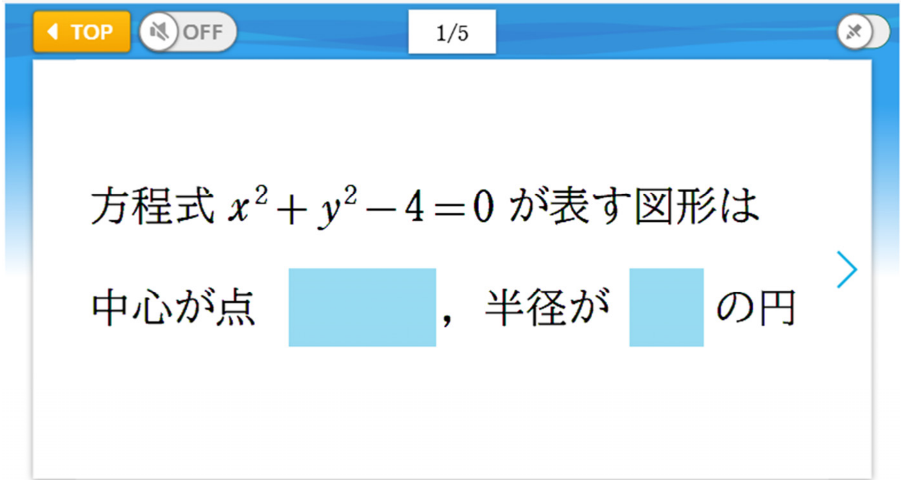
別紙 76



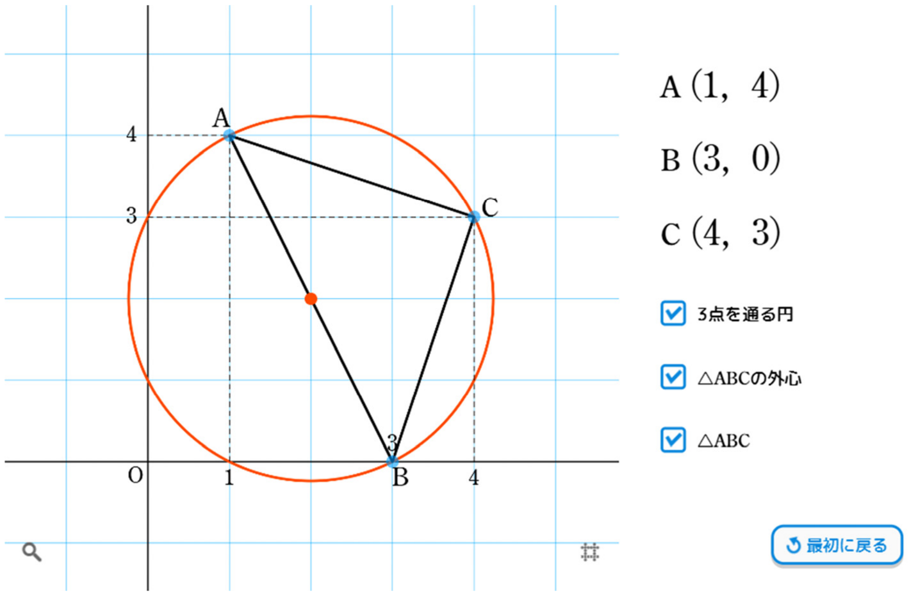
別紙 77



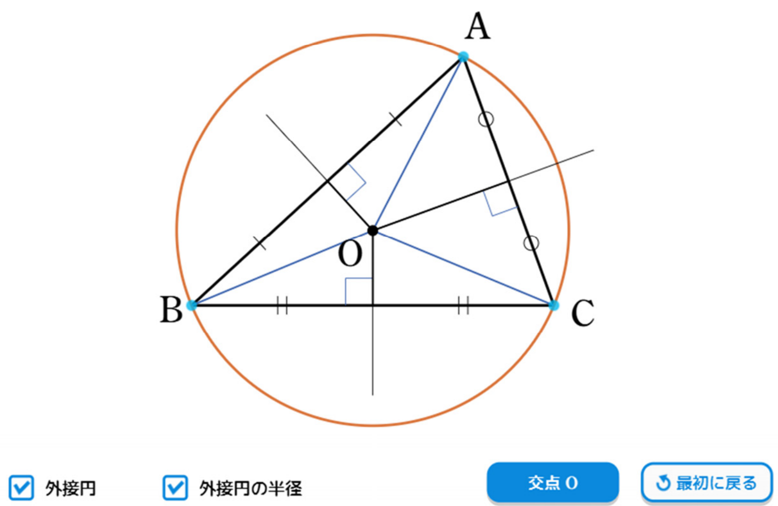
別紙 78



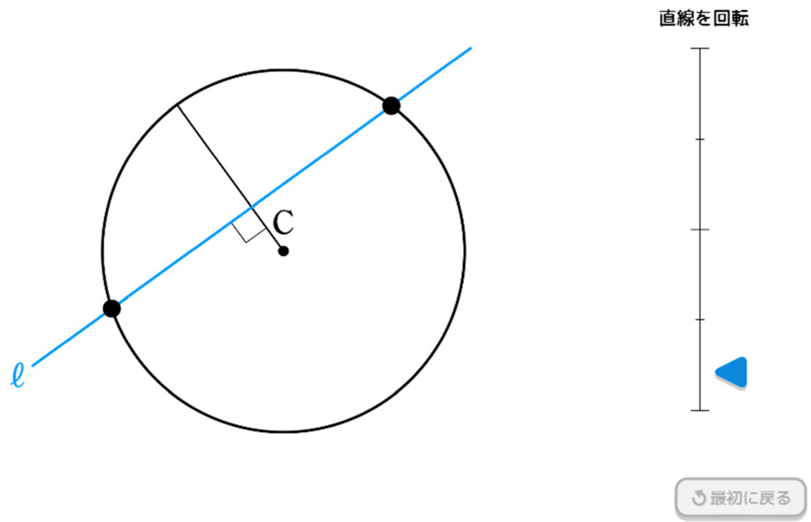
別紙 79



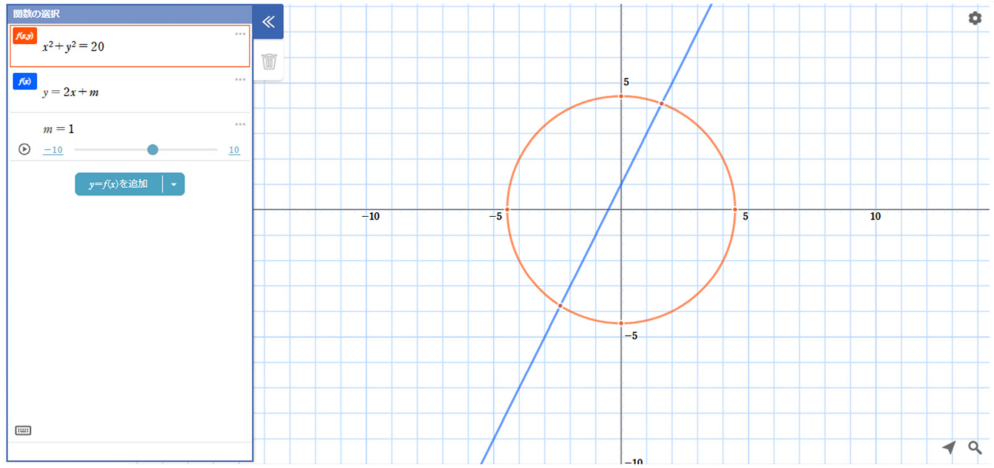
別紙 80



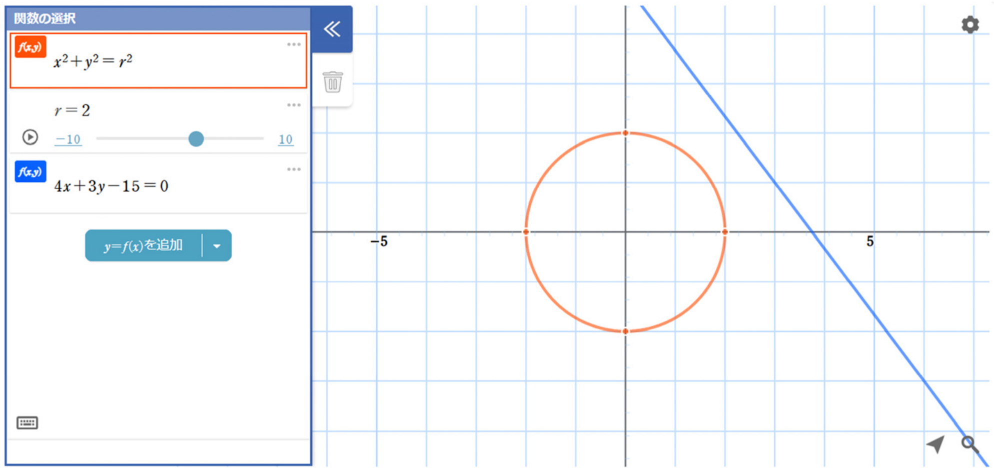
別紙 81



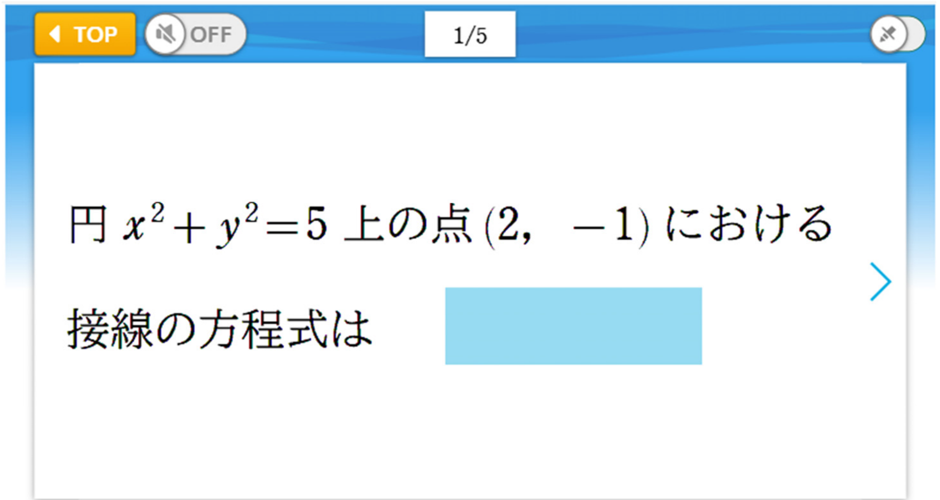
別紙 82



別紙 83

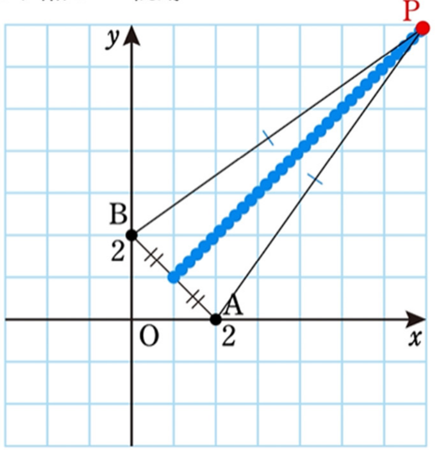


別紙 84



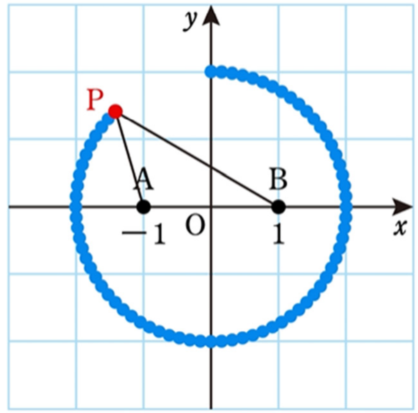
別紙 85

AP＝BP を満たす点 P の軌跡



別紙 86

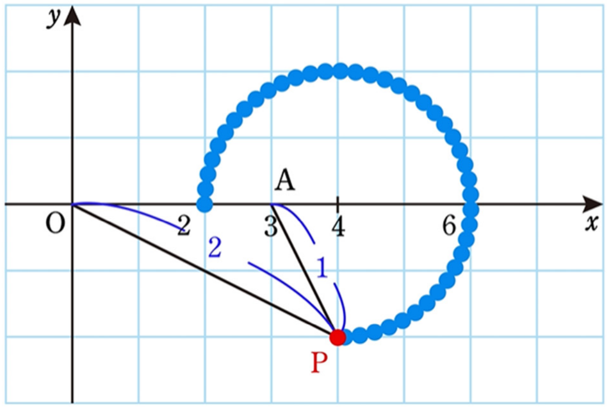
2 点 A (−1 , 0), B (1 , 0) からの距離の
2 乗の和が 10 である点 P の軌跡



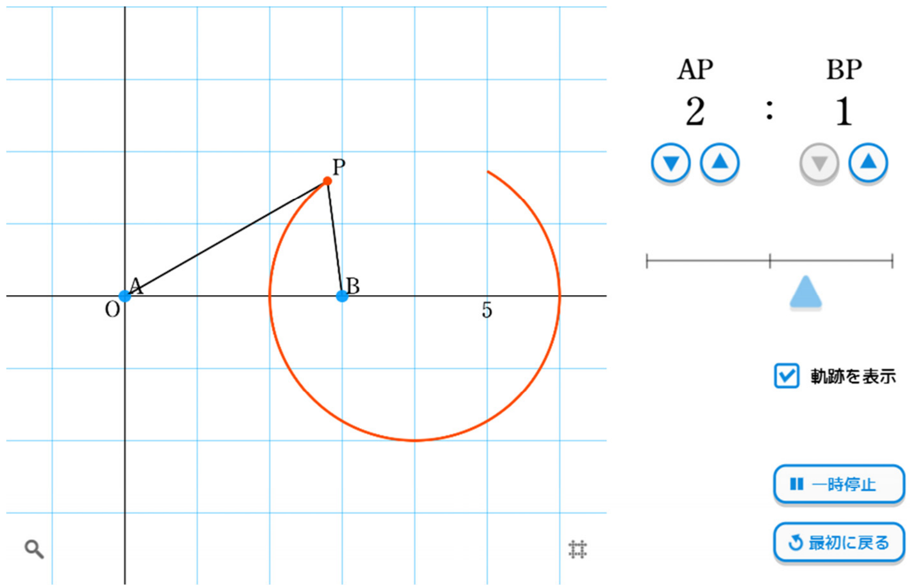
$AP^2+BP^2=10$

別紙 87

2 点 O(0, 0) A(3, 0) からの距離の比が
2 : 1 である点 P の軌跡

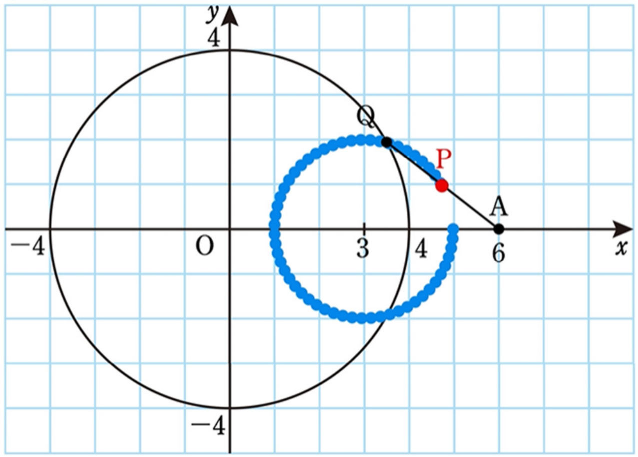


別紙 88

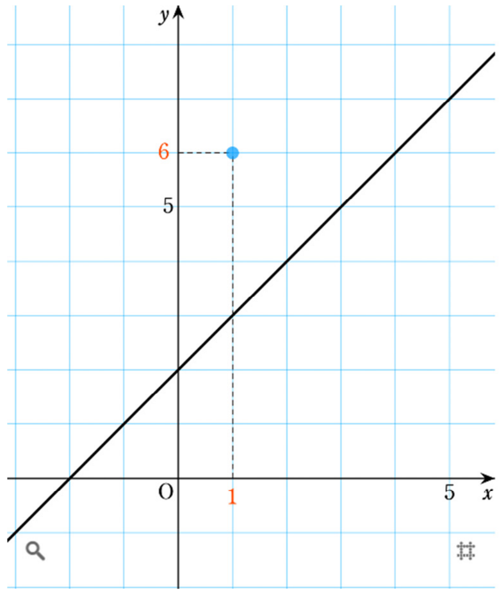


別紙 89

点 A (6, 0) と点 Q を結ぶ線分 AQ の中点 P の軌跡



別紙 90



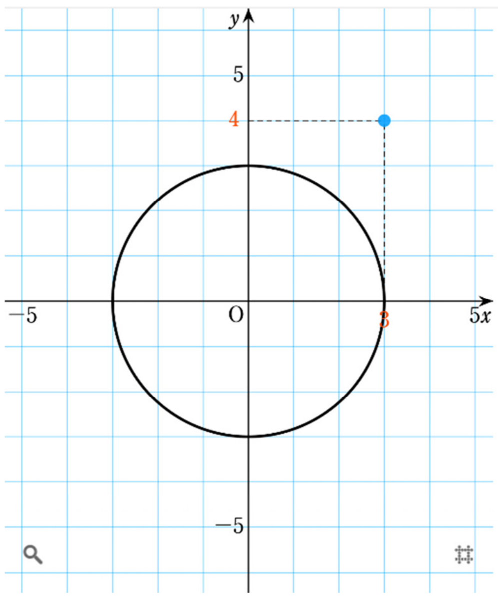
$6.0 > 1.0+2$

$y=x+2$

座標は小数第2位を四捨五入

最初に戻る

別紙 91



$3.0^2+4.0^2 > 3^2$

$x^2+y^2=3^2$

座標は小数第2位を四捨五入

最初に戻る

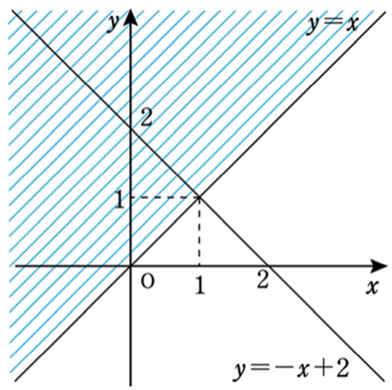
別紙 92

不等式 $(x-y)(x+y-2)>0$ の表す領域

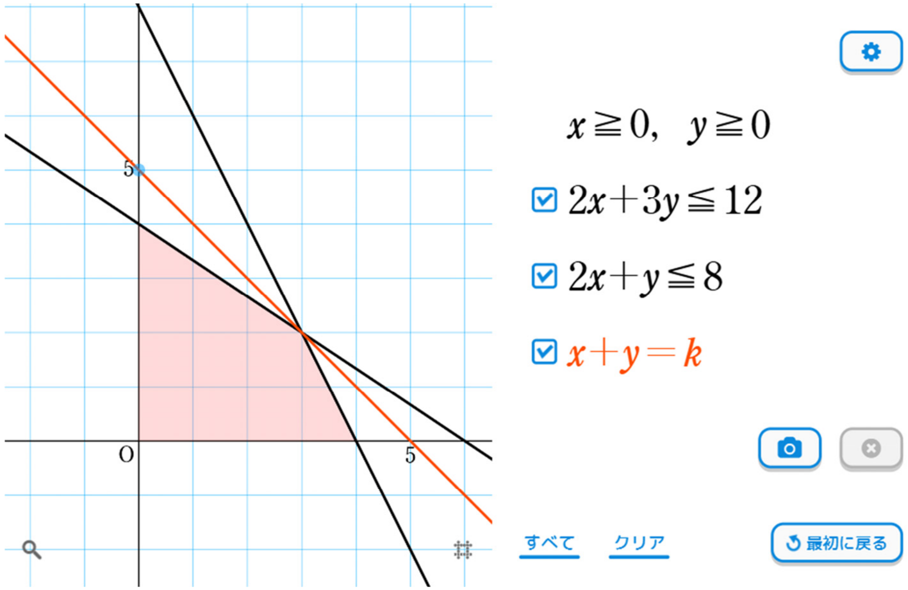
$$\begin{cases} x-y>0 \\ x+y-2>0 \end{cases}$$

または

$$\begin{cases} \boxed{x-y<0} \\ x+y-2<0 \end{cases}$$

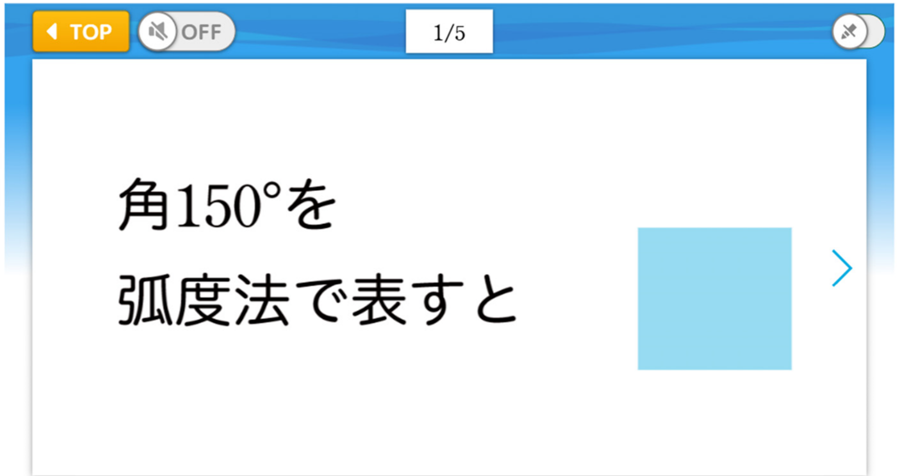


別紙 93

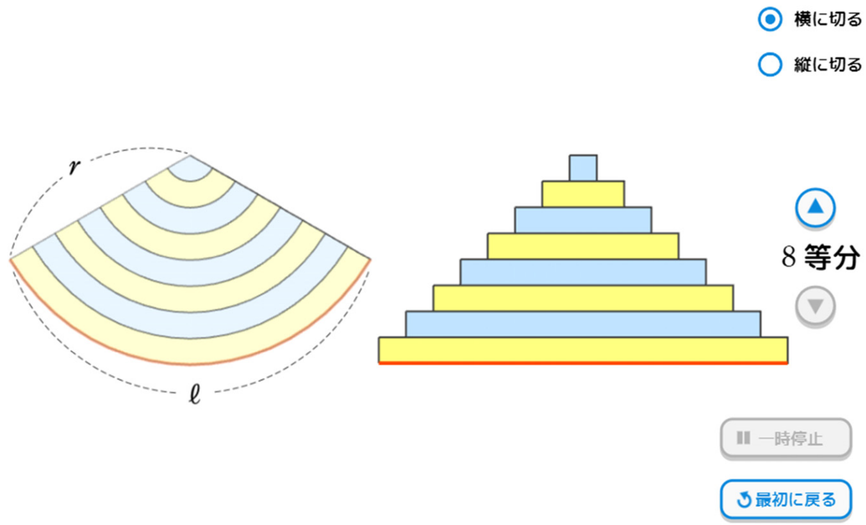


別紙 94

別紙 95



別紙 96



別紙 97

TOP OFF 1/5

半径 6，中心角 $\frac{\pi}{3}$ である扇形の

弧の長さは $\boxed{}$，面積は $\boxed{}$

別紙 98

TOP OFF 1/5

$\cos\frac{7}{6}\pi$ の値は $\boxed{}$

別紙 99

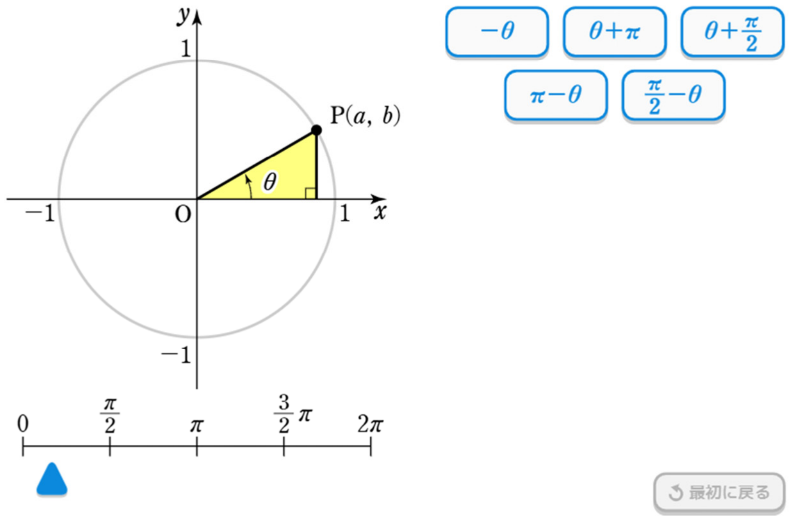
TOP OFF 1/5

θ の動径が第 1 象限にあり，

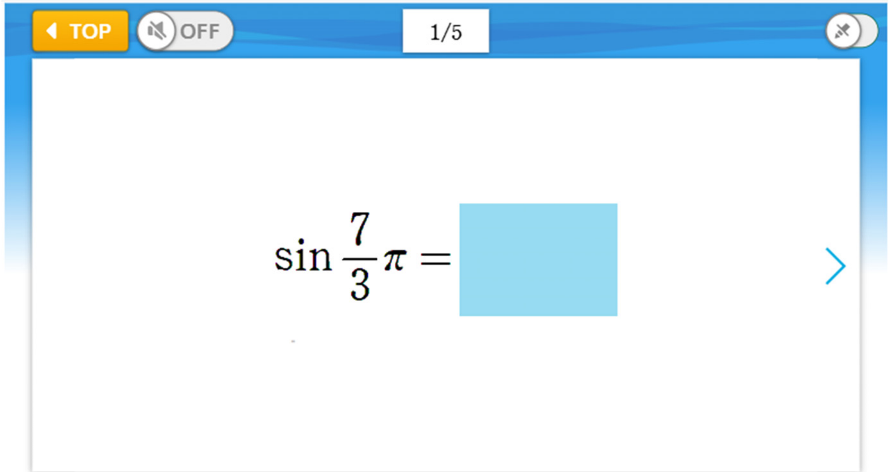
$\cos\theta = \frac{1}{9}$ のとき

$\sin\theta = \boxed{}$ $\tan\theta = \boxed{}$

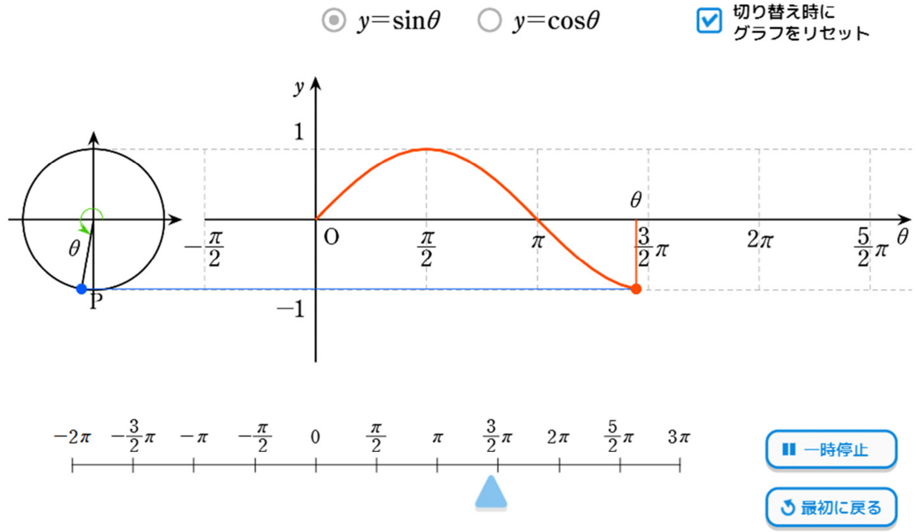
別紙 100



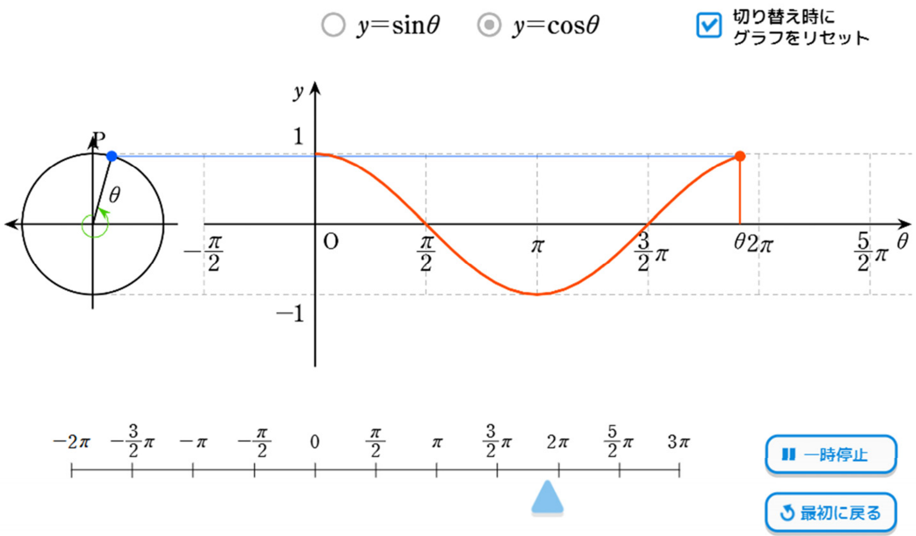
別紙 101



別紙 102



別紙 103



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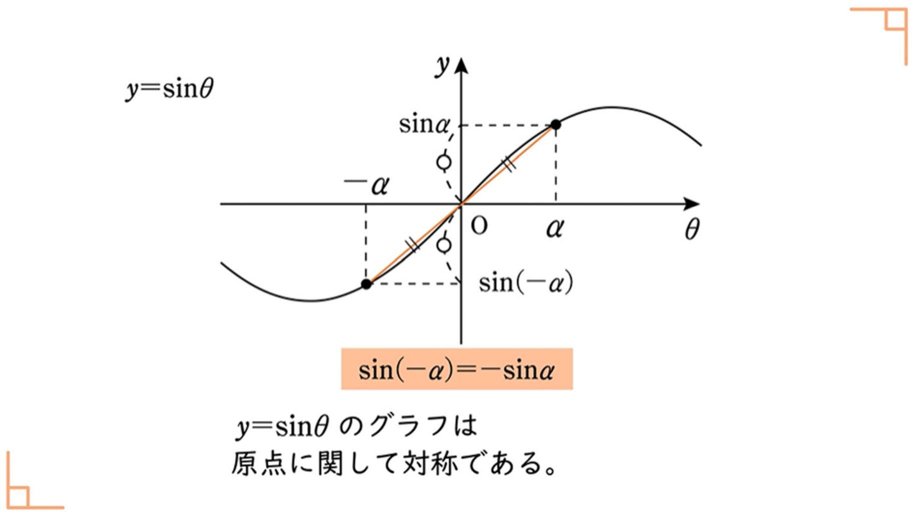
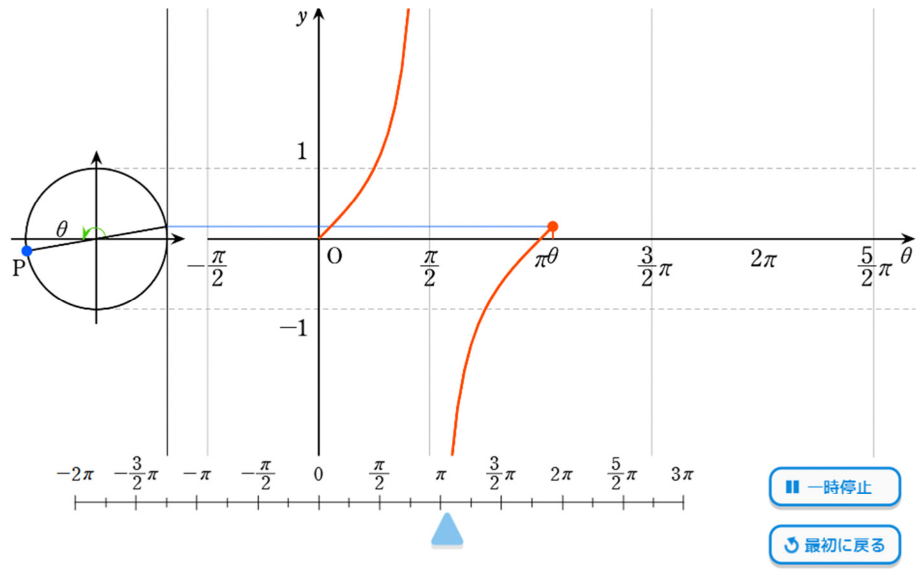
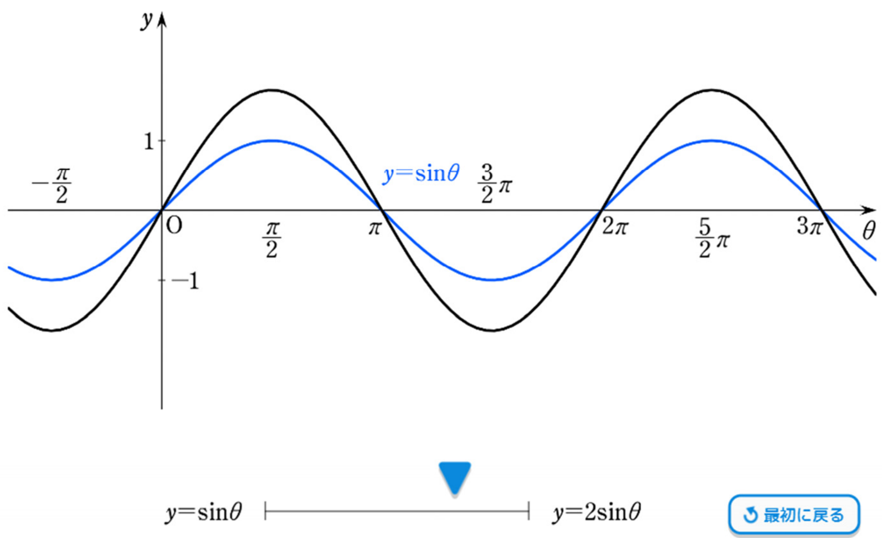
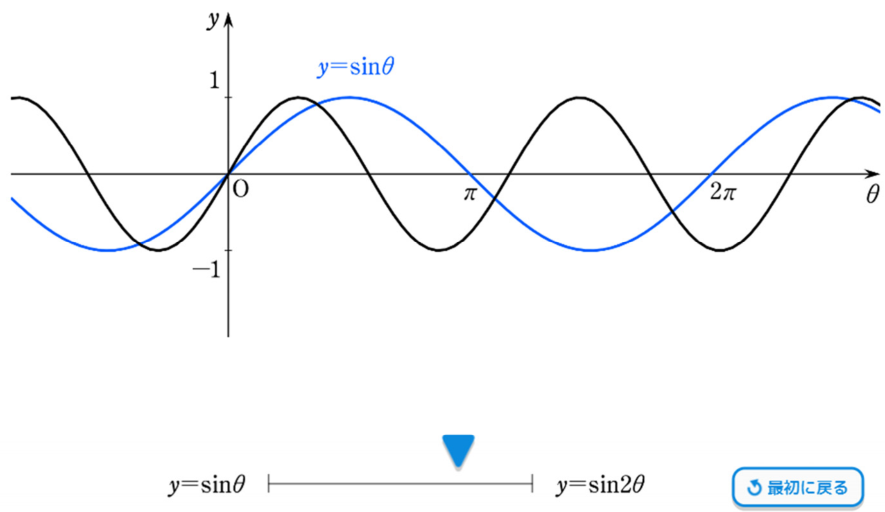




用語の解説

「限りなく近づく」





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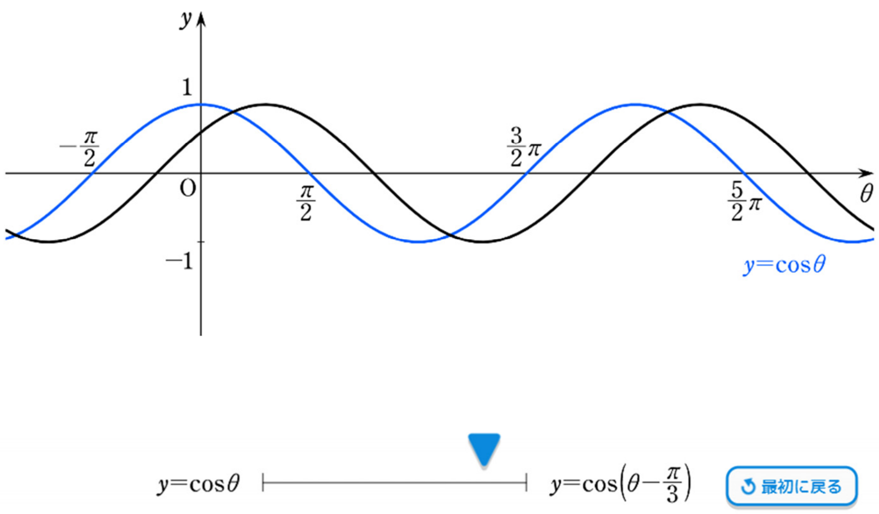

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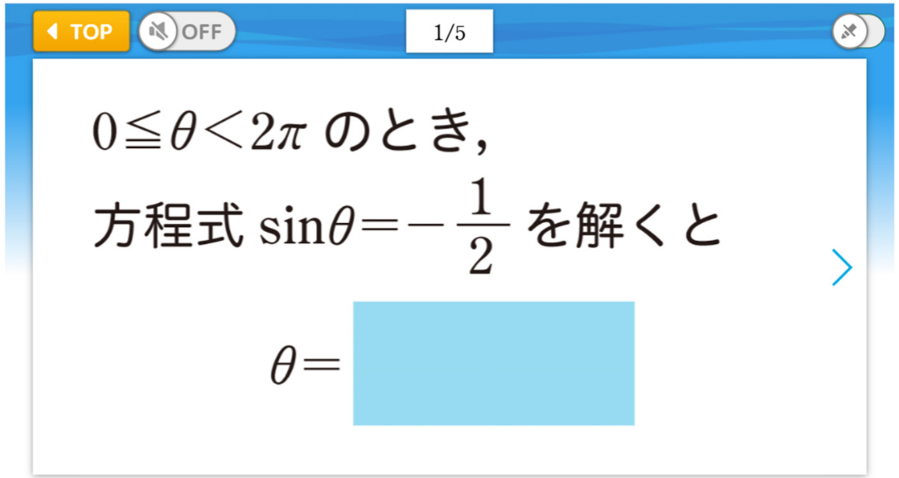

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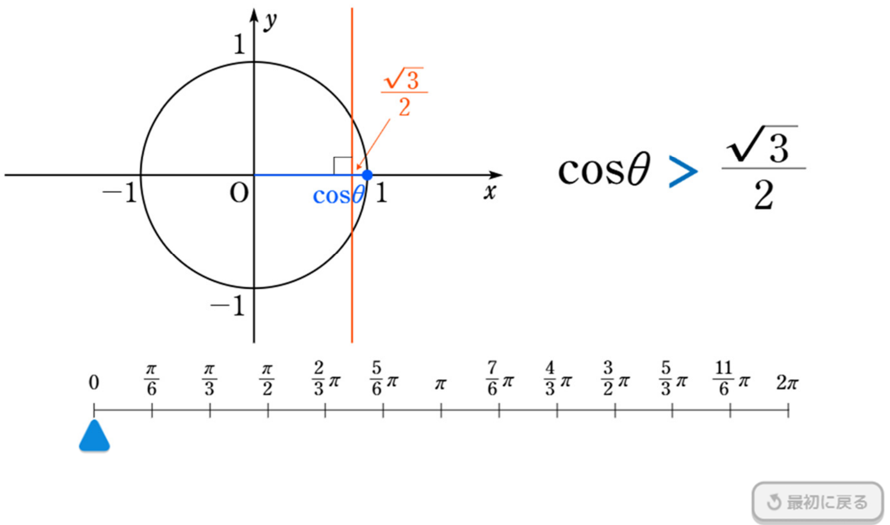

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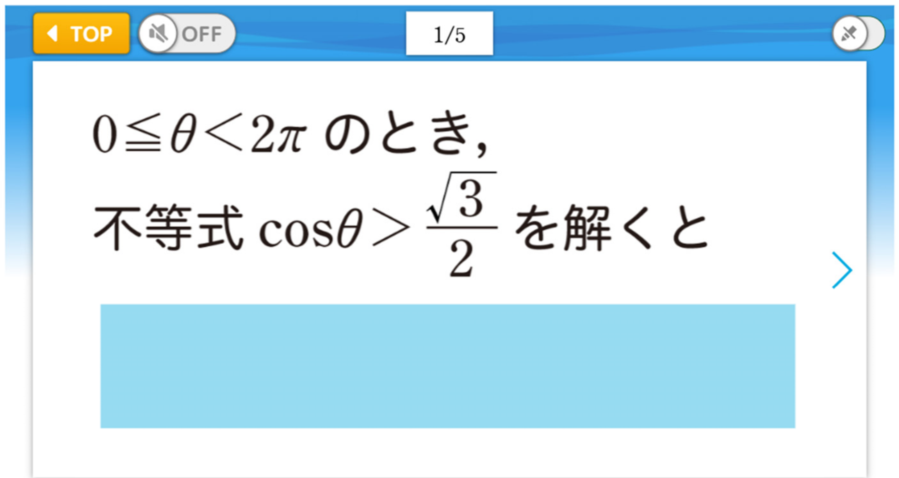

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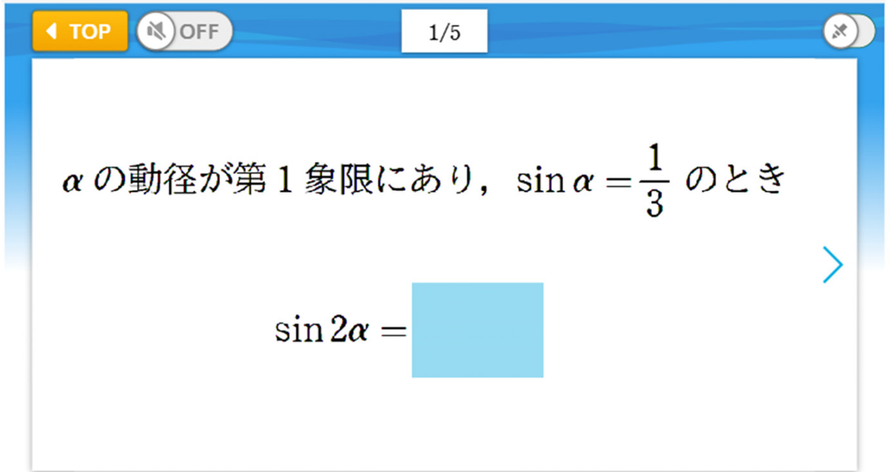
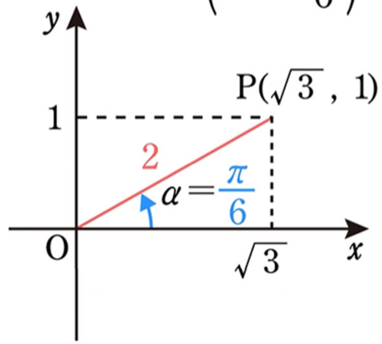


別紙 114

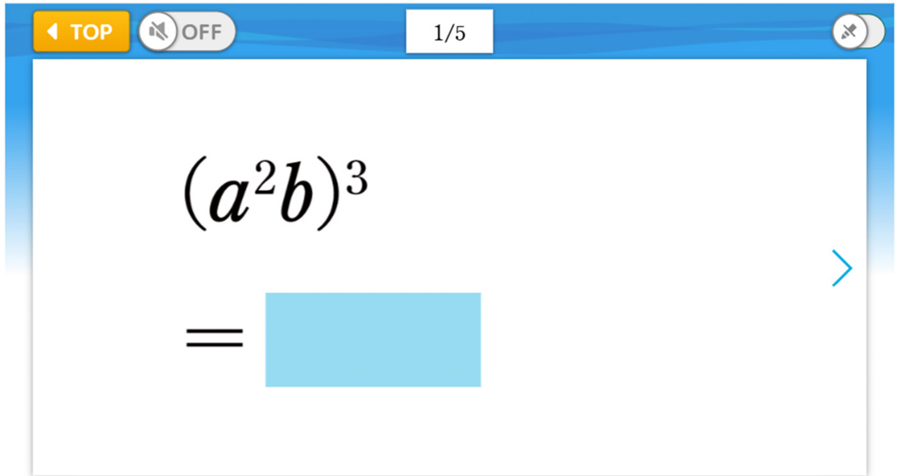
三角関数の合成

$$\sqrt{3}\sin\theta + 1\cdot\cos\theta = 2\sin\left(\theta + \frac{\pi}{6}\right)$$



別紙 115

別紙 116



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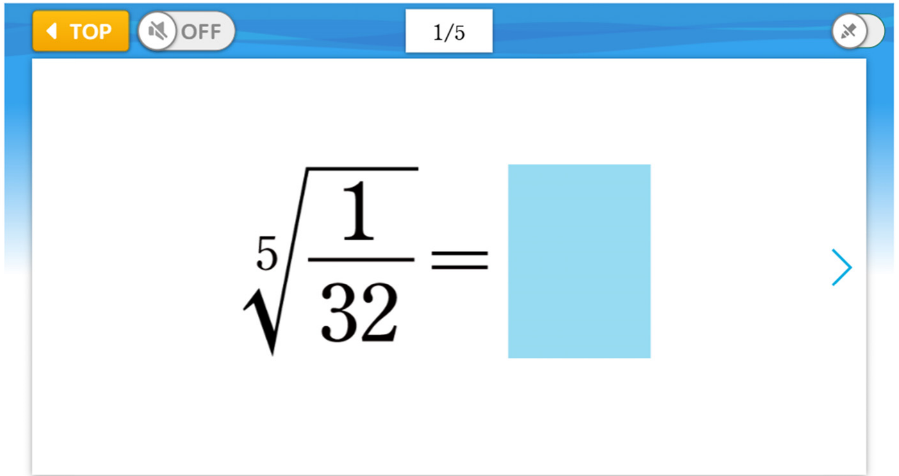
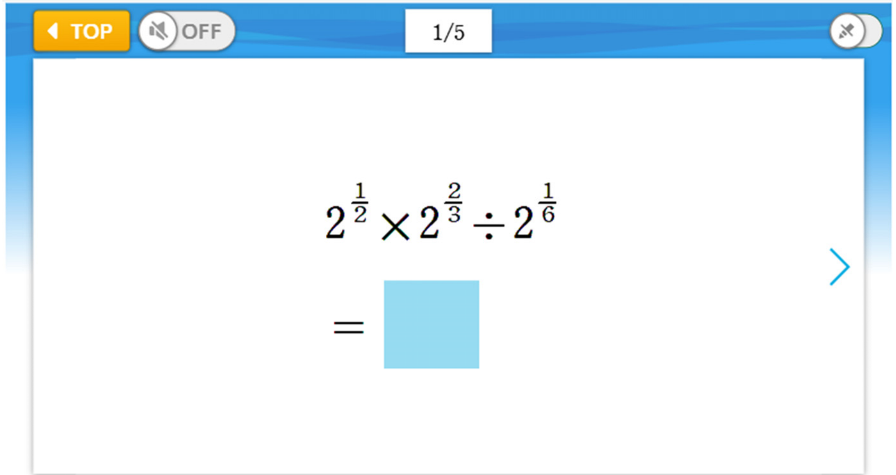


別紙 118



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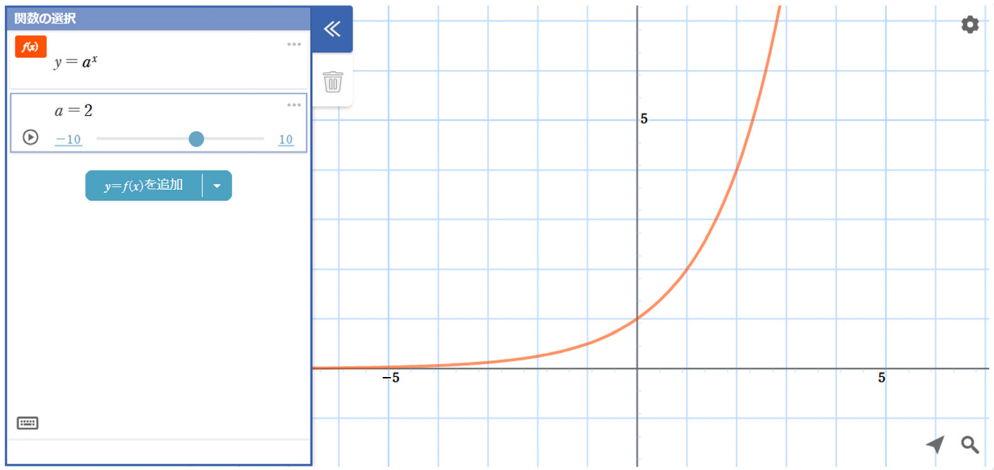

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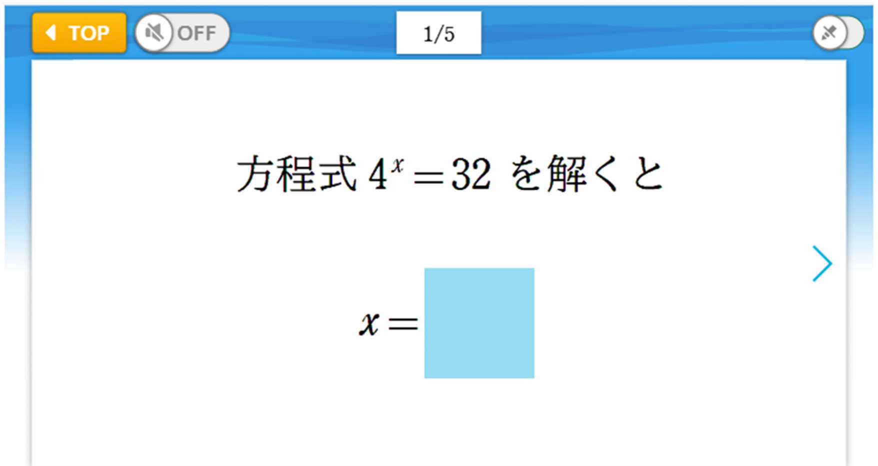

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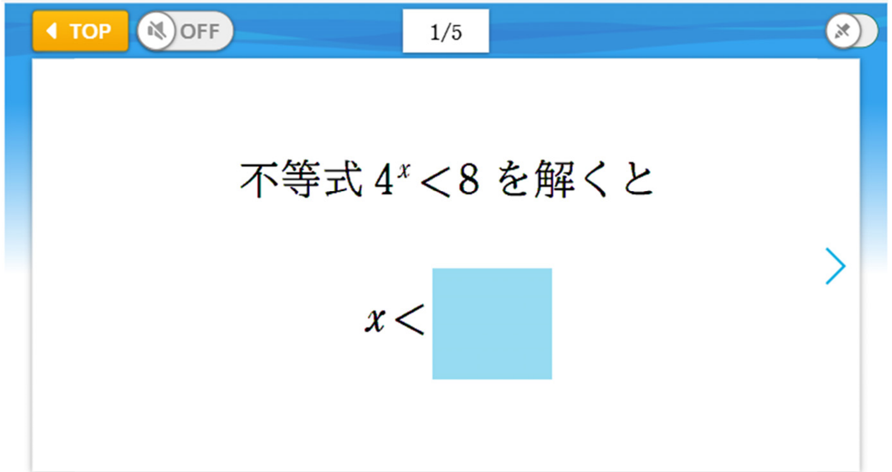

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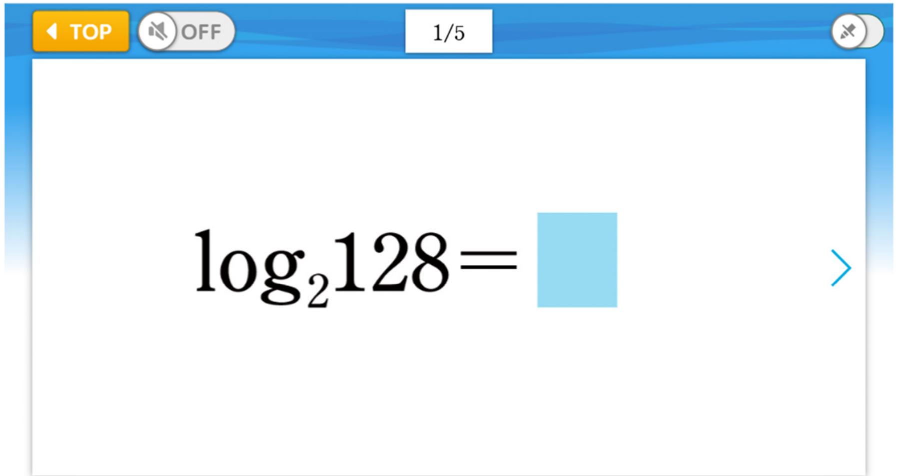

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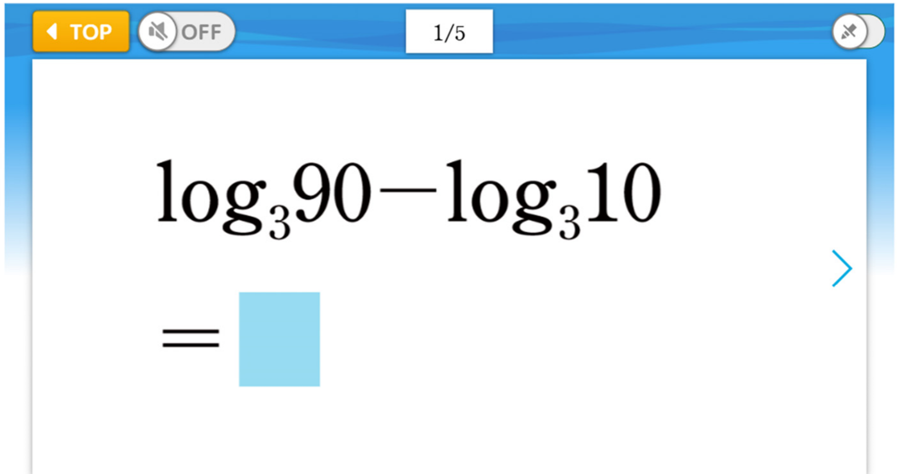

別紙 124

用語の解説

「対数をとる」