

数学 練習問題 1

氏名 _____

1. 次の計算をせよ。

(1) $(8 + 2i) + (3 + 3i)$

答. _____

(2) $(8 + 5i) + (7 + 5i)$

答. _____

(3) $(3 + 8i) + (7 + 9i)$

答. _____

(4) $(7 + 5i) + (5 + 7i)$

答. _____

(5) $(-6 - 8i) + (7 + 6i)$

答. _____

(6) $(-5 + i) + (-8 + 8i)$

答. _____

(7) $(2 - 7i) + (5 - 6i)$

答. _____

(8) $(-9 - 2i) + (-6 - 8i)$

答. _____

(9) $(4 + 4i) - (3 + i)$

答. _____

(10) $(5 + 5i) - (8 + 2i)$

答. _____

(11) $(5 + 5i) - (4 + 9i)$

答. _____

(12) $(3 + 2i) - (9 + 3i)$

答. _____

(13) $(6 + 2i) - (4 - 7i)$

答. _____

(14) $(-8 - 5i) - (-7 - 7i)$

答. _____

(15) $(-8 - i) - (8 - 2i)$

答. _____

(16) $(4 - 4i) - (-8 - 5i)$

答. _____

(17) $(6 + 7i) + (-2 + 6i)$

答. _____

(18) $(7 + 5i) - (5 + 2i)$

答. _____

(19) $(2 + 9i) - (-1 - i)$

答. _____

(20) $(-4 - 2i) - (-4 - 4i)$

答. _____

数学 練習問題2

氏名 _____

1. 次の計算をせよ。

(1) $(8 + 8i) + (7 + 4i)$

答. _____

(2) $(5 + 3i) + (7 + 3i)$

答. _____

(3) $(4 + i) + (1 + 5i)$

答. _____

(4) $(3 + 3i) + (2 + 5i)$

答. _____

(5) $(6 + 3i) + (-7 - 4i)$

答. _____

(6) $(-9 + 5i) + (2 - 6i)$

答. _____

(7) $(-2 + i) + (-4 + 2i)$

答. _____

(8) $(-8 + i) + (-1 + 9i)$

答. _____

(9) $(4 + 4i) - (4 + 3i)$

答. _____

(10) $(1 + 3i) - (3 + i)$

答. _____

(11) $(8 + i) - (8 + 6i)$

答. _____

(12) $(7 + i) - (5 + 8i)$

答. _____

(13) $(-6 + 6i) - (-2 + 8i)$

答. _____

(14) $(-1 - 2i) - (-2 - 5i)$

答. _____

(15) $(1 - 8i) - (-4 + 8i)$

答. _____

(16) $(-3 + 7i) - (4 - 8i)$

答. _____

(17) $(5 - 4i) + (2 - i)$

答. _____

(18) $(-7 + 3i) + (4 - i)$

答. _____

(19) $(-9 + i) + (9 - 7i)$

答. _____

(20) $(-7 - 7i) - (-8 + 3i)$

答. _____

数学 練習問題3

氏名 _____

1. 次の計算をせよ。

(1) $(3+i)(2+3i)$

答. _____

(2) $(5+2i)(3+2i)$

答. _____

(3) $(4+3i)(5+2i)$

答. _____

(4) $(1+i)(2+4i)$

答. _____

(5) $(5+5i)(3+i)$

答. _____

(6) $(4+3i)(3+4i)$

答. _____

(7) $(1-i)(1+4i)$

答. _____

(8) $(3-4i)(3-2i)$

答. _____

(9) $(4+2i)(5+4i)$

答. _____

(10) $(3-5i)(5+5i)$

答. _____

(11) $(3-i)(5-3i)$

答. _____

(12) $(5+2i)(1+3i)$

答. _____

(13) $(1-i)(4-2i)$

答. _____

(14) $(2+3i)(4-3i)$

答. _____

(15) $(-1+2i)(-2-i)$

答. _____

(16) $(-3+i)(1-3i)$

答. _____

(17) $(-5+3i)(-3+4i)$

答. _____

(18) $(3+2i)(4+i)$

答. _____

(19) $(-4+4i)(2+3i)$

答. _____

(20) $(-4+3i)(-3+4i)$

答. _____

数学 練習問題4

氏名 _____

1. 次の計算をせよ。

(1) $(1 + 2i)(5 + 3i)$

答. _____

(2) $(3 + 2i)(2 + 3i)$

答. _____

(3) $(3 + i)(3 + 2i)$

答. _____

(4) $(5 + 5i)(3 + 4i)$

答. _____

(5) $(3 + i)(5 + 4i)$

答. _____

(6) $(4 + 3i)(1 + 5i)$

答. _____

(7) $(3 + i)(2 + i)$

答. _____

(8) $(5 + 5i)(2 - 2i)$

答. _____

(9) $(1 - 3i)(5 + 5i)$

答. _____

(10) $(4 - 5i)(5 - 4i)$

答. _____

(11) $(3 + 2i)(5 + 2i)$

答. _____

(12) $(5 - 4i)(4 + 4i)$

答. _____

(13) $(4 + i)(5 - 3i)$

答. _____

(14) $(1 + 5i)(4 - i)$

答. _____

(15) $(3 - i)(4 - 2i)$

答. _____

(16) $(1 + 4i)(-1 - i)$

答. _____

(17) $(3 + 5i)(-5 - 5i)$

答. _____

(18) $(-1 - 4i)(2 + 5i)$

答. _____

(19) $(2 - 5i)(-2 - i)$

答. _____

(20) $(-1 - i)(1 + i)$

答. _____

数学 練習問題5

氏名 _____

1. 次の計算をせよ。

$$(1) \frac{3-5i}{3i}$$

答. _____

$$(2) \frac{3-4i}{2i}$$

答. _____

$$(3) \frac{4+3i}{3i}$$

答. _____

$$(4) \frac{1+i}{-5i}$$

答. _____

$$(5) \frac{-4}{3+4i}$$

答. _____

$$(6) \frac{-5i}{4-5i}$$

答. _____

$$(7) \frac{-1}{3+2i}$$

答. _____

$$(8) \frac{-2}{1+5i}$$

答. _____

$$(9) \frac{2-i}{2+i}$$

答. _____

$$(10) \frac{3+4i}{3-4i}$$

答. _____

$$(11) \frac{1-i}{1+i}$$

答. _____

$$(12) \frac{-4-3i}{-4+3i}$$

答. _____

$$(13) \frac{3+4i}{1-3i}$$

答. _____

$$(14) \frac{5-5i}{1+5i}$$

答. _____

$$(15) \frac{1+2i}{2-4i}$$

答. _____

$$(16) \frac{4-4i}{2-5i}$$

答. _____

$$(17) \frac{-2-3i}{1+i}$$

答. _____

$$(18) \frac{-1+i}{3-5i}$$

答. _____

$$(19) \frac{-3-3i}{-1+i}$$

答. _____

$$(20) \frac{1-i}{-1+4i}$$

答. _____

数学 練習問題 6

氏名 _____

1. 次の計算をせよ。

$$(1) \frac{1-i}{2i}$$

答. _____

$$(2) \frac{1+4i}{-3i}$$

答. _____

$$(3) \frac{3-4i}{4i}$$

答. _____

$$(4) \frac{5-3i}{-5i}$$

答. _____

$$(5) \frac{4i}{2+3i}$$

答. _____

$$(6) \frac{4i}{2-3i}$$

答. _____

$$(7) \frac{-5i}{1+3i}$$

答. _____

$$(8) \frac{5i}{5-i}$$

答. _____

$$(9) \frac{1+i}{1-i}$$

答. _____

$$(10) \frac{3-5i}{3+5i}$$

$$(11) \frac{5+4i}{5-4i}$$

答. _____

$$(12) \frac{-4+5i}{-4-5i}$$

答. _____

$$(13) \frac{5-3i}{5+i}$$

答. _____

$$(14) \frac{2+2i}{4-3i}$$

答. _____

$$(15) \frac{5+5i}{4+5i}$$

答. _____

$$(16) \frac{5+5i}{1+5i}$$

答. _____

$$(17) \frac{-2-5i}{-3-2i}$$

答. _____

$$(18) \frac{-5+2i}{-3-5i}$$

答. _____

$$(19) \frac{-3+4i}{-5+2i}$$

答. _____

$$(20) \frac{-4-2i}{2+i}$$

答. _____

答. _____

数学 練習問題 7

氏名 _____

1. 次の等式を満たす実数 x, y の値を求めよ。

(1) $y + 5i = xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(2) $y + 7i = 1 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(3) $y + 5i = 9 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(4) $x + i = 5 + yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(5) $x + 6i = 8 + yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(6) $x + 2i = 9 + yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(7) $y + 6i = xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(8) $y + 4i = 3 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(9) $x + 7i = yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(10) $y = 7 + xi$

(11) $x + 5i = -yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(12) $-y + 9i = -xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(13) $-x - i = -7 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(14) $x - 5i = 8 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(15) $x + 5i = 7 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(16) $-y = 8 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(17) $-y + 4i = 9 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(18) $-x - 8i = 7 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(19) $-y - 4i = 5 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(20) $-y + 5i = 1 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

数学 練習問題8

氏名 _____

1. 次の等式を満たす実数 x 、 y の値を求めよ。

(1) $-3y + 2i = 9 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(2) $-2x - 6i = -4 - 3yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(3) $-2y - 2i = 4 + xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(4) $-y - 6i = 4 - 2xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(5) $2y + 8i = 8 + 2xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(6) $-x - 8i = 3 - 2yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(7) $-3y + 6i = -6 + 2xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(8) $-3y + 12i = 6 - 3xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(9) $-3y - 6i = -12 - 3xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(10) $-3y + 2i = -12 - xi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(11) $3x - 2i = -6 + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(12) $(x + y) - 2i = -1 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(13) $(x + y) + 4i = 1 + yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(14) $(x + y) + i = -5 - yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(15) $2x + 2i = -2 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(16) $(x + y) + 9i = -1 + 3yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(17) $2x + 2i = 6 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(18) $-x + 3i = 1 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(19) $2x - 4i = 8 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(20) $(x + y) - 8i = -2 + 2yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

数学 練習問題9

氏名 _____

1. 次の等式を満たす実数 x 、 y の値を求めよ。

(1) $-3x - 6i = y + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(2) $x + 2i = y - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(3) $-3x + 6i = y - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(4) $x - 8i = y + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(5) $(x + y) + xi = -9 + 2yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(6) $x + 2i = y + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(7) $2x + 3i = y - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(8) $(x + y) + xi = -8 - 3yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(9) $(x + y) + xi = 5 - 2yi$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(10) $3x + 8i = y - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(11) $(x - y) + 2i = -16 + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(12) $(x - y) - 13i = -3 + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(13) $(x - y) - 10i = 8 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(14) $(x - y) + 6i = 12 + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(15) $(x - y) - 4i = 8 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(16) $(x - y) + 10i = -8 - (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(17) $(x - y) - 11i = 5 + (x + y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(18) $(x + y) + 4i = -6 - (x - y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(19) $(x + y) + 4i = 2 - (x - y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

(20) $(x + y) + 6i = 12 - (x - y)i$

答. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

数学 練習問題 10

氏名 _____

1. 次の複素数と共役な複素数をいえ。

(1) $-2 + i$

答. _____

(2) $-3 - i$

答. _____

(3) $-1 + i$

答. _____

(4) $2 - 3i$

答. _____

(5) $-2 + 3i$

答. _____

(6) $1 + 2i$

答. _____

(7) $2 - 2i$

答. _____

(8) $-3 + 3i$

答. _____

(9) $3 - i$

答. _____

(10) $2 - i$

答. _____

(11) $\frac{7 + \sqrt{7}i}{6}$

答. _____

(12) $\frac{5 - \sqrt{2}i}{4}$

答. _____

(13) $\frac{7 + \sqrt{5}i}{4}$

答. _____

(14) $\frac{-1 + \sqrt{7}i}{6}$

答. _____

(15) $\frac{-5 + \sqrt{3}i}{6}$

答. _____

(16) i

答. _____

(17) -2

答. _____

(18) $-2i$

答. _____

(19) 2

答. _____

(20) $2i$

答. _____

数学 練習問題 11

氏名 _____

1. 次の2次方程式を解け。

(1) $2x^2 - x + 1 = 0$

答. _____

(2) $x^2 + 3x + 5 = 0$

答. _____

(3) $x^2 - x + 1 = 0$

答. _____

(4) $x^2 - x + 3 = 0$

答. _____

(5) $2x^2 - x + 2 = 0$

答. _____

(6) $x^2 - x + 5 = 0$

答. _____

(7) $x^2 - 3x + 4 = 0$

答. _____

(8) $x^2 + 3x + 4 = 0$

答. _____

(9) $2x^2 - 5x + 4 = 0$

答. _____

(10) $x^2 + x + 2 = 0$

答. _____

(11) $x^2 + 1 = 0$

答. _____

(12) $x^2 + 2x + 3 = 0$

答. _____

(13) $2x^2 + x + 2 = 0$

答. _____

(14) $2x^2 + 3x + 3 = 0$

答. _____

(15) $2x^2 - 4x + 3 = 0$

答. _____

(16) $x^2 - x + 4 = 0$

答. _____

(17) $x^2 + 3x + 6 = 0$

答. _____

(18) $2x^2 + 5x + 5 = 0$

答. _____

(19) $x^2 + x + 3 = 0$

答. _____

(20) $x^2 + x + 4 = 0$

答. _____