

2019 年营口职业技术学院单独招生考试数学复习题

一、单选题

$$\begin{array}{cccc}
 x & & x & \\
 x|x & & x|x & & x|x & & x|x \\
 a & b & & & & & \\
 ac & bc & & ac & bc & & a & c & b & c & & \frac{a}{c} & \frac{b}{c} \\
 (x & & x & & & & & & & & & & \\
 x|x & \text{或} & x & & x| & & x & & & & & & \\
 x & y & & & x & \frac{1}{x} & y & \frac{1}{y} & & & & & \\
 - & & - & & - & & & & & & & & \\
 - & & - & & - & & - & & - & & & & \\
 - & & - & & - & & - & & - & & & & \\
 \vec{a} & \vec{b} & & & & & & & & & & & \\
 \vec{a} & \vec{b} & & & \vec{a} & \vec{b} & & & \vec{a} & \vec{b} & & & \\
 \vec{a} & \vec{b} & & & \vec{a} & \vec{b} & & & & & & & \\
 & & & & & \vec{AB} & & & & & & &
 \end{array}$$

$$\begin{array}{cccc}
 \vec{AD} + \vec{AB} & & & \\
 \vec{DB} & \vec{AC} & \vec{BD} & \vec{CA}
 \end{array}$$

$\vec{AB} + \vec{BA} = 0$ $0\vec{AB} = 0$ $\vec{0} \cdot \vec{AB} = 0$ $\vec{AB} - \vec{BA} = 0$

$\sqrt[3]{5^x} = \sqrt{125}$

- A. 3 B. 9 C. $\frac{1}{9}$ D. $\frac{9}{2}$

- A. B. $ABCD - A_1B_1C_1D_1$ C. $2\sqrt{3}$ D.

$BC \ A_1C_1$

- A. 30° B. 45° C. 60° D. 90°
 AA_1 AA_1

- A. 2 B. 4 C. 6 D. 8

- α α
A. 1 B. 2 C. 3 D. 4

- A. 1 B. 2 C. 4 D. 8
 $\sqrt{6a}$

- A. a^2 B. $2a^2$ C. $4a^2$ D. $8a^2$

cm^3

- A. 8 B. 24 C. 48 D. 144
 $S - ABC$ $E \ F$ $SC \ AB$
 $EF \ SA$

- A. 90° B. 60° C. 45° D. 30°

$$\begin{aligned}
 & a \subset \alpha \quad b \subset \beta \quad a // b \quad \alpha // \beta \\
 & \quad \quad \quad \alpha \subset \beta \quad c // \alpha \quad c // \beta \quad \alpha // \beta \\
 & a \subset \alpha \quad b \subset \beta \quad \alpha // \beta \quad a \cap b = \emptyset \\
 & a \subset \alpha \quad \alpha // \beta \quad a // \beta
 \end{aligned}$$

- A. 0 B. 1 C. 2 D. 3

$$y = -2x^2 + x - 1$$

- A. $(-\infty, \frac{1}{4}]$ B. $(-\infty, \frac{1}{4})$ C. $[\frac{1}{4}, +\infty)$ D. $[\frac{1}{4}, +\infty)$

$$y = x^2 - 4x + 6$$

- A. $(-\infty, 2]$ B. $(-\infty, 2)$ C. $[2, +\infty)$ D. $[2, +\infty)$

- A. $0.9^{0.1} > 0.9^{0.2}$ B. $1.1^{-2} > 1.1^{-2.1}$ C. $\log_2 3 < 0$

- D. $\log_5 3 > 1$

$$\log_5 4 \cdot \log_8 5$$

- A. $\frac{2}{3}$ B. $\frac{3}{2}$ C. $\frac{1}{2}$ D. 2

$$y = \log_a(2x - 1) \quad (a > 0 \quad a \neq 1)$$

- A. $(-\infty, \frac{1}{2})$ B. $(\frac{1}{2}, +\infty)$ C. $(-\infty, \frac{1}{2}]$ D. $[\frac{1}{2}, +\infty)$

$$(8)^{\frac{2}{3}}$$

- A. 2 B. $\frac{1}{2}$ C. $\frac{1}{4}$ D. $\frac{1}{8}$

$$\lg^5 \sqrt{1000}$$

- A. $\frac{1}{5}$ B. $\frac{2}{5}$ C. $\frac{3}{5}$ D. 5

$$\lg^{\frac{1}{4}} 25$$

- A. 2 B. -2 C. 100 D. $\frac{1}{100}$

- A. $y = x^{\frac{3}{2}}$ B. $y = x^{\frac{2}{3}}$ C. $y = x^{\frac{1}{3}}$ D. $y = x^{\frac{1}{3}}$

$$m > n$$

- A. $2^n > 2^m$ B. $0.2^m > 0.2^n$

C. $\log_{0.2}m > \log_{0.2}n$

$M(2,5)$ $P(2,3)$

A. $(1,2)$

B. $(2,1)$

D. $\log_2m > \log_2n$

M^* M^*

C. $(2,4)$

D. $(4,2)$

$x - 2y + 6 = 0$ y

A. 3

B. -3

C. 6

D. -6

1 . l_1 $y = 2x + 1$ l_2 $y = -\frac{1}{2}x + 3$

2 . l_1 $y = \frac{1}{3}x + 3$ l_2 $y = \frac{1}{3}x + 4$

3 . l_1 $x - y - 2 = 0$ l_2 $2x + 2y + 3 = 0$

4 . l_1 $x + y = 0$ l_2 $x = 1$

A. 0

B. 1

C. 2

D. 3

$3x - 4y + 6 = 0$ $(x - 2)^2$

- A. 9.4 0.484
C. 9.5 0.04

- B. 9.4 0.016
D. 9.5 0.016

- A.
C.

- B.
D.

A. 0.3

B. 0.4

C. 0.5

D. 0.6

A. 85.5

B. 85

C. 86

D. 86.5

A. 1

B. 2

C. 3

D. 6

(x,y)

A. 2

B. 4

C. 6

D. 8

A. $\frac{1}{2}$

B. $\frac{1}{3}$

C. $\frac{1}{4}$

D. $\frac{1}{6}$

A. $\frac{1}{2}$

B. $\frac{1}{3}$

C. $\frac{2}{3}$

D. $\frac{1}{6}$

A. $\frac{1}{4}$

B. $\frac{1}{2}$

C. $\frac{3}{4}$

D. 1

$$y = x^2 \quad x = 3$$

A. 2

B. 3

C. 6

D. 9

A. x 轴

B. y 轴

C.

D.

y 轴

A. 导 0

B. 值

C. 值 间

D. 间

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$x \ R$

$y \ x \ -$

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\bar{a} \bar{b} $\bar{a} \bar{b}$

$x \ Z \ x \ x \ m$

$x \ Z \ x \ x \ m$

$x \ Z \ x \ x \ m$

$x \ Z \ x \ x \ m$

$x \ Z \ x \ x \ m$

$x \ m$

$x \ m \quad m > 0$

$x \ m \quad m \leq 0$

$m \leq 0 \quad x \ m$

$$x^m \quad m < 0$$

$$p \quad q$$

$$p \quad q \quad p \quad q \quad p$$

$$z \quad m \quad m \quad i$$

$$z \quad i$$

$$i \quad i \quad i$$

$$\sqrt{\quad}$$

$$\sqrt{\quad}$$

$$z|z \quad a \quad bi$$

$$x \quad y \quad i \quad x \quad y \quad R$$

$$- \quad - \quad - \quad -$$

$$\frac{x}{x} \quad \frac{x}{x}$$

$$y \frac{x}{x}$$

$$f(x) \quad x$$

$$f(x) \sqrt{x} \quad x$$

$$f(x) \quad x \quad f$$

$$y \frac{x}{x} \quad x$$

$$f(x) \quad x$$

$$\sqrt{x} \quad \sqrt{x}$$

$$\{\beta \mid \beta = 70^\circ + k \cdot 360^\circ\}$$

$$\frac{x}{x} \quad \frac{x}{x}$$

$$\frac{x}{x} \quad \frac{x}{x}$$

$$\frac{x}{x} \quad \frac{x}{x}$$

$$a \quad a \quad \frac{a_n}{n}$$

$$x \quad y \quad \frac{x \quad y}{x \quad y}$$

$$x \quad y \quad \underline{\hspace{2cm}}$$

$$x \quad y \quad \underline{\hspace{2cm}}$$

三、解答题

$$y = f(x)$$

$$f \quad f \quad f \quad f$$

$$f(x) = kx + b$$

$$\begin{cases} 3(k + b) = 19 \\ 2b + (k + b) = 14 \end{cases}$$

$$\begin{cases} 5k + 2b = 19 \\ k + 3b = 14 \end{cases}$$

$$y = 5x + 3$$

$$f(x) = x^2 + x - 2$$

$$f(x) = x^2 + x - 2$$

$$f(x) = 6x^2 + 6x - 12 = 6(x^2 + x - 2)$$

$$6(x^2 + x - 2) > 0$$

$$x < -2 \quad x > 1$$

$$f(x) \in (-\infty, -2) \cup (1, +\infty)$$

$$6(x^2 + x - 2) < 0 \quad 2 < x < 1$$

$$f(x) \in (2, 1)$$

$$f(x) = x^2 + x - 2$$

$$f(x)$$

$$f(x) = 2 - 3x^2$$

$$k = f(-1) = 1$$

$$y - 1 = 1 \times (x + 1)$$

$$x + y + 2 = 0$$

$$q \cdot q \quad a_n \quad a$$

S

$$a_n$$

$$a \quad a q \quad a q^2 \quad \dots \quad a$$

$$q \quad q \quad q \quad q$$

$$q \quad q$$

$$a_n \quad a q^n$$

$$a_n \quad n \quad n \quad n$$

$$a_n \quad a \quad a \quad a \quad a$$

$$a_n \quad a_n$$

$$a_n \quad a \quad q$$

$$a \quad q \quad q$$

$$a \quad a$$

$$q \quad q -$$

$$a_n \quad a_n \quad a q^n \quad - \quad n$$

$$a_n \quad S \quad \frac{\quad}{\quad} \quad -$$

$$f(x) \quad x \quad m \quad x \quad m \quad m$$

m

m m m

m m

m f x x x

m f x x x

m m

f x x

A(6 4)

$\frac{4}{3}$

A(6 4)

$\frac{4}{3}$

$$y + 4 = -\frac{4}{3}(x - 6)$$

$$4x + 3y - 12 = 0$$

$$4x + 3y - 12 = 0$$

$$y = 0 \quad x = 3 \quad x$$

$$x = 0 \quad y = 4 \quad y$$

$$S = \frac{1}{2} \times 3 \times 4 = 6$$

A B C

ACM

A B C °

A ° B C B C B C B C

$B \quad C$

$B \quad B \quad \circ$

$$ACM \quad \frac{AC \quad MC \quad AM}{AC \quad MC} \quad \sqrt{\quad}$$

$f \ x \quad x \quad ax \quad y \quad f \ x$

$a \quad f \ x$

$f \ x \quad x \quad ax \quad f \ x \quad x \quad a$

$y \quad f \ x$

$f \quad a \quad a$

$f \ x \quad x$

$f \ x \quad x \quad x \quad x \quad x$

$f \ x \quad x \quad x \quad f \quad f \quad f \quad f$

$f \ x$

$BC \quad AB \quad B \quad \circ$

$AC \quad AB \quad BC \quad AB \quad BC \quad B \quad \circ$

$AC \quad \sqrt{\quad}$

$S \quad -AB \quad BC \quad B \quad - \quad \frac{\sqrt{\quad}}{\quad} \quad \frac{\sqrt{\quad}}{\quad}$

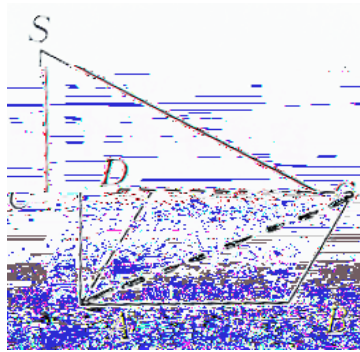
x ——— y ———

k_{AB} ——— —

k —

y — x

x y



c

$$AC = \sqrt{9^2 + 12^2} = 15(cm)$$

$$R_t \Delta SAC \quad SA = \sqrt{25^2 - 15^2} = 20(cm)$$

(cm)

y f x

f f f

f x ax bx c

$$\begin{matrix} c \\ a & b & c \\ a & b & c \end{matrix}$$

$$\begin{matrix} c \\ a \\ b \end{matrix}$$

$$f(x) = \sqrt{2-x} + \log_2(3x)$$

$$f(x) = \sqrt{2-x} + \log_2(3x)$$

$$\begin{cases} 2-x > 0 \\ 3x > 0 \end{cases}$$

$$0 < x < 2$$

$$f(x) \text{ defined on } \{x \mid 0 < x < 2\}$$

$$f(x) = 2(m+1)x^2 + 4mx + 2m - 1$$

m

m

$$2(m+1)x^2 + 4mx + 2m - 1 = 0$$

$$\Delta = (4m)^2 - 4 \times 2(m+1)(2m-1) > 0$$

$$m < 1$$

$$f(0) = 0$$

$$2(m+1) \times 0 + 4m \times 0 + 2m - 1 = 0$$

$$m = \frac{1}{2}$$

$$x + y - 2 = 0$$

$$2\sqrt{2}$$

$$x + y + c = 0$$

$$x + y - 2 = 0 \quad P(0, 2)$$

$$x + y + c = 0 \quad 2\sqrt{2}$$

$$\frac{|1 \times 0 + 1 \times 2 + c|}{\sqrt{1^2 + 1^2}} = 2\sqrt{2}$$

$$c = 2 \quad c = -6$$

$$x + y + 2 = 0 \quad x + y - 6 = 0$$

—

$$x|x \quad k \quad k \quad Z$$

$$f \ x \quad - \quad x$$

$$x|x \quad k \quad k \quad Z$$

$$\underline{x} \quad \underline{y}$$

$$\frac{2\sqrt{3}}{\sin 120^\circ} = \frac{2}{\sin C}$$

$$\sin C = \frac{1}{2} \quad 30^\circ$$

$$30^\circ$$

$$b = c = 2$$

$x \quad y \quad x$

$x \quad y$

$x \quad y \quad x$

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

$$d = \frac{|Ax_0 + By_0 + C|}{\sqrt{A^2 + B^2}}$$

$$d = \frac{| \quad |}{\sqrt{\quad}}$$

$a_n \quad S \quad a \quad a$

$S \quad a \quad \text{---}$

a

$a \quad a \quad d$

a

$$\cos \theta = \frac{1}{2} \quad \sin \theta \quad \tan \theta$$

$$\cos \theta = \frac{1}{2} > 0 \quad \theta \quad \text{终边}$$

$\theta \quad \text{终边}$

$$\sin \theta = \sqrt{1 - \cos^2 \theta} = \sqrt{1 - \left(\frac{1}{2}\right)^2} = \frac{\sqrt{3}}{2}$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta} = \sqrt{3}$$

θ 终边

$$\sin \theta = -\sqrt{1 - \cos^2 \theta} = -\sqrt{1 - \left(\frac{1}{2}\right)^2} = -\frac{\sqrt{3}}{2}$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta} = -\sqrt{3}$$