

II ()

11

-4

7

6-7

5-6

4

« + »

2-3

1

0

1

$$3x+c=0 \quad \left(\begin{array}{l} c \\ \sin \\ \cos \end{array} \right) \quad 5x^2-$$

7

$$c = -1,6.$$

$$\begin{aligned} \frac{\sin}{\sin} + \frac{\cos}{\cos} = 0,6. \quad (\sin + \cos)^2 = 0,36 \Leftrightarrow 1 + 2 \sin \cos = 0,36 \Leftrightarrow 2 \sin \cos = -0,64 \Leftrightarrow \\ \sin \cos = -0,32. \quad , c/5 = -0,32, \quad , c = -1,6. \end{aligned}$$

$$\cos = 0,6 \Leftrightarrow \sin(\alpha + \pi/4) = (3\sqrt{2})/10, \quad \sin +$$

2

7

$$\begin{aligned} P, Q \quad R - \quad A. \quad DA, AB \quad BC \\ \Delta PAQ = \Delta RBQ. \quad \angle PAQ = 90^\circ + \alpha = \angle RBQ, \quad PQ \perp QR. \end{aligned}$$

3

$$x^2 + y^3 = z^5$$

7

$$k=3s, m=2s. \quad x=2^k, y=2^m, z=2^n. \quad 2^{2k} + 2^{3m} = 2^{5n}. \quad : 2^{6s} + 2^{6s} = 2^{5n}, \quad 2^{6s+1} = 2^{5n}.$$

$$6s+1, 5n \quad , \quad 30t+25 \quad (\quad 30t+25 \quad 5 \quad 1$$

$$6s+1=5n.$$

$$s=5t+4, n=6t+5.$$

$$: x=2^{15t+12}; y=2^{10t+8}; z=2^{6t+5}.$$

4

$$f(x) = \frac{1}{\sqrt[3]{1-x^3}}$$

$$f(\dots f(f(19))\dots)_{95}$$

7

$$\sqrt[3]{1-\frac{1}{19^3}}$$

$x -$

$0 \quad 1.$

$$f(f(x)) = \frac{1}{\sqrt[3]{1-(f(x))^3}} = \sqrt[3]{1-\frac{1}{x^3}}$$

$$f(f(f(x))) = \frac{1}{\sqrt[3]{1-(f(f(x)))^3}} = x$$

2,

3.

95

3

$$f(\dots f(f(19))\dots)_{95} = f(f(19)) = \sqrt[3]{1-\frac{1}{19^3}}$$

5

2010.

2.

?

7

2010, 1005, 502, 251, 125, 62, 31, 15, 7, 3

2

$$2k \quad 2k+1 \quad (k > 2) -$$

k,

$$2k, \quad 2k+1.$$

$$[k+1, 2k-$$

1],