

120

97.5

$$\frac{4}{24} - \frac{1}{24} - \frac{3}{24}$$

1018)

$$\begin{aligned} 8 + n + n &= \frac{2}{6} n \\ n &= \frac{1}{24} n \end{aligned}$$

λυση $\left(\frac{1}{3}\right) \rightarrow n = 0$

$n + n = 2 \cdot \frac{1}{8} \cdot \frac{1}{8}$ $n + n = \frac{1}{8}$

λυση $\frac{2}{3} - \lambda_{\text{σημα}} 2, 67 \approx 3.54$

1020) 66 76 52 85

$$\begin{array}{r} 350 \\ 17.5 \end{array}$$

23 ηη/σση

$$\begin{array}{r} 27 \\ 5 \\ 184 \end{array}$$

25

17

72 4

1017) a=7, b=3, c=3

$$665 + (9.6 \times 58) + (1.8 \times 160) - (4.7 \times 26) \\ 666 + (13.7 \times 20) + (5 \times 17A) - (6.8 \times 28)$$

$$\begin{array}{cccccccc} 5 & 7 & 4 & 8 & 3 & 2 & 2 & 2 \\ \hline & 3 & & & & & & \end{array}$$

$$25 \quad 27 \quad 19 \quad 3 \times 9 \quad 4 \times 11$$

$$10 \quad 14 \quad 19 \quad 27 \quad 44$$

$$\begin{array}{cccc} 4 & 5 & 8 & 19 \\ \hline 1 & 3 & 7 & 19 \end{array}$$

$$\begin{array}{r} 40 \\ 20 \\ \hline 77 \end{array}$$

$$3x \quad 7x$$

120

$$x = 12 \rightarrow u_1 \quad 11x$$

$$\text{vö 6) } (f \circ g)(x) = x^3 + x + C$$

$$f(x) = 3x + 1$$

$$(f \circ g)(x) = 3g(x) + 1$$

$$\text{Wd } 3g(x) + 1 = x^3 + x + C$$

$$g(0) = 1 \rightarrow 9u \cdot x = 0$$

$$\text{Wd } C = 0$$

$$g(x) = \frac{1}{9}(x^3 + x + 1)$$

$$\int_0^7 g(x) dx = \frac{1}{9} \left(\frac{x^4}{4} + \frac{x^2}{2} + 3x \right) \Big|_0^7$$

$$\approx \frac{5}{4} = 1.25$$

$$\text{vö 7) } 1-x \quad \left\langle -\frac{3}{7} \right\rangle \quad (7-x) \quad \left\langle +x \right\rangle$$

$$1 \quad \left\langle x - \frac{3}{7} \right\rangle \quad \left\langle \right\rangle \quad \left\langle +\frac{3}{7} \right\rangle$$

$$\frac{3}{7} \quad \left\langle x \right\rangle \quad \left\langle 7 - \frac{3}{7} \right\rangle$$

$$\left\langle x \right\rangle \quad \left\langle 6 \right\rangle \quad \left\langle \right\rangle$$

$$\text{vö 9) } \text{Zunächst } f(x) = 0 \text{ Ziffern } 0, -4, 2$$

1122 in 9er Restsystem \rightarrow Rest $x = 0$

$$f(0) = k(0+4)(0-2)$$

$$16 = k(4)(-2)$$

$$-2 = k$$

$$\text{Nullstellen von } f(x) = -2(x+4)(x-2)$$

$$-2x^2 - 4x + 16$$

Wurde Δ berechnet \rightarrow $\Delta = 16 + 128 = 144$

$$\frac{-4 \pm \sqrt{144}}{2 \cdot (-2)} = \frac{-4 \pm 12}{-4} = \frac{-16}{-4} = 4 \quad \text{oder} \quad \frac{8}{-4} = -2$$

$$\text{vö 10) } N = 8 \rightarrow \text{un } f = 3, t = 0$$

$t = 1$

$$N = 2, s$$

$$\text{Wurde } \Delta \text{ berechnet } \rightarrow \Delta = 8^2 - 4 \cdot 3 \cdot 0 = 64$$

$$\frac{8 \pm \sqrt{64}}{2 \cdot 3} = \frac{8 \pm 8}{6}$$

$$= \frac{16}{6} = \frac{8}{3}$$

$$\frac{16 <}{2 = } \\ \frac{200}{}$$

70

$$1.) 2^{n-1} = 2^0 \dots 2^{n-1}$$

$$\ln 2 \cdot n = 8$$

$$\ln 2 \cdot n = 8 \rightarrow n = \frac{8}{\ln 2}$$

$$2.) 2(a_1 + a_3 + \dots + a_n) = 30$$

$$a_1 + a_3 + \dots + a_n = 15$$

$$a_2 + a_4 + \dots + a_{20} = -2$$

$$a_4 - a_2 = 3$$

$$a_4 + a_2 = 16$$

$$a_3 + a_1 = 3$$

$$a_3 + a_2 = 73 \quad a_2 + a_1 = 70$$

5.)

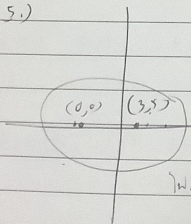
$$\frac{(y-5)^2}{9} + \frac{(x-3)^2}{3} = 1$$

$$a = 5, \quad b = 3$$

$$\text{mit } c \rightarrow c = 4$$

$$(h, k) = (3, 5)$$

$$\text{Wah } f_1(7, 5), f_2(-1, 5)$$

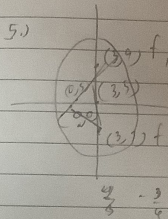


22 24 26 28 30 32 34 36 38
12 13 14 15 16 17 18 19 20

10 10 (2x 10) (10x 10)

$$\frac{78}{2} = 39 \\ \frac{152}{10} = 15.2 \\ \frac{1140}{1140} = 1$$

5.)



$$= \left(\frac{3+0}{2}, \frac{5+0}{2} \right)$$

$$= \left(\frac{3}{2}, \frac{5}{2} \right)$$

$$d = \sqrt{\left(\frac{3}{2} \right)^2 + \left(\frac{5}{2} \right)^2}$$

$$= \sqrt{\frac{9}{4} + \frac{25}{4}} = \sqrt{\frac{34}{4}} = \frac{\sqrt{34}}{2}$$

$$\frac{4}{3} = \frac{3}{4}$$

$$\frac{-3}{4} = \frac{1-y}{5-x}$$

$$d = \sqrt{a + 36(4)}$$

$$-a + 3x = 4 - 4y$$

$$3x + 4y = 13$$

3.84

$$\frac{4}{3} = \frac{5-y}{5-x}$$

4.8

$$-4x - 15 = -2y$$

$$-4x + 3y = 15$$

$$9x + 12y = 39$$

$$-16x + 12y = 60$$

$$25x = -21$$

$$x = -\frac{21}{25}$$