

11 klase B-2

N1 1) $\frac{11^3}{6} - \frac{13^3}{2} = \frac{11}{6} - \frac{39}{6} = -\frac{28}{6} = -\frac{14}{3}$

2) $-\frac{14}{3} \cdot \frac{27}{7} = -14 \cdot 8 = -112$

Ombem: (-112)

N2 $\frac{37 \cdot 46}{125} = \frac{37 \cdot 46}{35 \cdot 45} = 9 \cdot 4 = 36$

Ombem: (36)

N3 1) 90p - 100%
x p - 120%

$x = \frac{90 \cdot 120}{100} = 9 \cdot 12 = 108(p)$

2) $1100 : 108 = 10, \dots$

Ombem: (10)

N4 $S = \frac{1}{2} \cdot \frac{18}{7} \cdot \frac{8}{7} \cdot \frac{7}{4} = 9 \cdot 2 = 18$

Ombem: (18)

N5 $(2\sqrt{11} - \sqrt{7})(2\sqrt{11} + \sqrt{7}) = (2\sqrt{11})^2 - (\sqrt{7})^2$
 $= 4 \cdot 11 - 7 = 44 - 7 = 37$

Ombem: (37)

N6 1) $\begin{array}{r} 14892 \\ -14700 \\ \hline 192 \end{array}$ 2) $\begin{array}{r} 192 \\ \times 1,9 \\ \hline 1728 \\ 192 \\ \hline 364,8 \end{array}$

Ombem: (384,8)

N7 $\frac{1}{7x+13} = \frac{1}{4x-5}$

$7x+13 = 4x-5$

$3x = -18$

$x = -18 : 3$

$x = -6$

Ombem: (-6)

N8 $15,5 - 15,3 = 0,2$

Ombem: 0,2.

N9 (2134)

N10 $\frac{3}{20} = 0,15$

Ombem: (0,15)

N11 Ombem: (6)

N12 4) $\frac{15000 \cdot 6}{100} = 150 \cdot 6 = 900p$

1) 877,5p 2) 612,5p 2) 512,5p

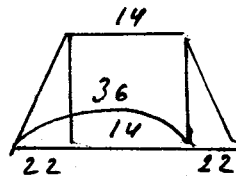
Ombem: (900)

N13 $d^2 = 2^2 + 2^2 + 1^2 = 9$

$d = 3$ Ombem: (3)

N14 (1342)

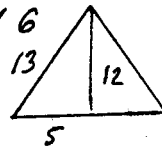
N15



$\frac{14+58}{2} = \frac{72}{2} = 36$

Ombem: (36)

N16



$l^2 = 13^2 - 5^2 = 169 - 25 = 144$

$l = \sqrt{144} = 12$

$S_6 = \frac{1}{2} \cdot 4 \cdot 10 \cdot 12 = 20 \cdot 12 = 240$

$S_{\text{okn}} = 10 \cdot 10 = 100$

$S_{n.n} = 240 + 100 = 340$

Ombem: (340)

N17 (4231)

N18 (23)

N19 (842)

N20 $\begin{cases} 5z = 6c + 1u \\ 8c = 6z + 1u \end{cases}$

$\begin{cases} 5z = 6c + 1u \quad | \cdot 6 \\ -6z = -8c + 1u \quad | \cdot 5 \end{cases}$

$\begin{cases} 30z = 36c + 6u \\ -30z = -40c + 5u \end{cases}$

$-4c + 11u = 0$

$11u = 4c \quad | \cdot 5$

$55u = 20c$

Ombem: (20)

N1 1) $\frac{5^{11}}{6} - \frac{19^{12}}{3} = \frac{5}{6} - \frac{38}{6} = \frac{-33}{6} = -\frac{11}{2}$

2) $\frac{-11}{2} \cdot 24 = \frac{-11 \cdot 24}{2} = -132$

Ombem: (-132)

N3 1) 120p - 100%
x p - 130%

$x = \frac{120 \cdot 130}{100} = 12 \cdot 13 = 156$

2) $\begin{array}{r} 1200 \\ -1092 \\ \hline 108 \end{array} \begin{array}{l} 156 \\ 7 \end{array}$

Ombem: (7)

N4 $S = \frac{1}{2} \cdot \frac{8}{7} \cdot \frac{15}{7} \cdot \frac{1}{3} = 4.5 = 20$

Ombem: (20)

N5 $(2\sqrt{2} - \sqrt{3}) \cdot (2\sqrt{17} + \sqrt{3}) = (2\sqrt{17})^2 - (\sqrt{3})^2$
 $4 \cdot 17 - 3 = 68 - 3 = 65$

Ombem: (65)

N6 $\begin{array}{r} 80158 \\ -79991 \\ \hline 167 \end{array} \begin{array}{r} 167 \\ \times 1,6 \\ \hline 7002 \\ +167 \\ \hline 267,2 \end{array}$

Ombem: (267,2)

N20 $\begin{cases} 5z = 7c + 1u \\ 10c = 7z + 1u \end{cases}$

$\begin{cases} 5z = 7c + 1u \quad | \cdot 7 \\ -7z = -10c + 1u \quad | \cdot 5 \end{cases}$

+ $\begin{cases} 35z = 49c + 7u \\ -35z = -50c + 5u \end{cases}$

$0 = -1c + 12u$

$-12u = -1c$

$12u = 1c \quad | \cdot 5$

$60u = 5c$

Ombem: (5)

N2 $\frac{2^9 \cdot 5^8}{10^7} = \frac{2^9 \cdot 5^8}{2^7 \cdot 5^7} = 4 \cdot 5 = 20$

Ombem: (20)

N7 $\frac{1}{7x-16} = \frac{1}{6x+18}$

$6x+18 = 7x-16$

$6x-7x = -16-18$

$-x = -34$

$x = 34$

Ombem: (34)

N8 $20,5 - 20 = 0,5$ Ombem: (0,5)

N9 (2134)

N10 $\frac{6}{24} = \frac{1}{4} = 0,25$

Ombem: (0,25)

N11 Ombem: (4)

N12 1) $\frac{16000 \cdot 5}{100} = 800$ руб.

2) 500 3) 700 4) 700

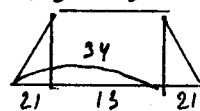
Ombem: (800)

N13 $d^2 = 2^2 + 2^2 + 1^2 = 9$
 $d = 3$

Ombem: (3)

N14 (3421)

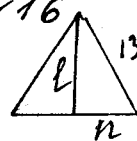
N15 13



$\frac{13+55}{2} = 68:2 = 34$

Ombem: (34)

N16



$l^2 = 13^2 - 12^2$ по т. Пифагора
 $l = 5$

$S_{\Delta n} = \frac{1}{2} \cdot 4 \cdot 24 \cdot 5 = 240$

$S_{\text{окл}} = 24 \cdot 24 = 576$

$S_n = 240 + 576 = 816$

Ombem: 816

N17 (4321)

N18 (23)

N19 (841)

Найдите значение выражения:

N1. $\left(\frac{7}{8} - 8\frac{1}{4}\right) \cdot 16 = (-118)$

1) $\frac{7}{8} - \frac{33}{4} = \frac{7-66}{8} = -\frac{59}{8}$

2) $-\frac{59}{8} \cdot \frac{16}{1} = \frac{-59 \cdot 2}{1} = -118$

Найдите значение выражения:

N2. $\frac{2^7 \cdot 7^6}{14^5} = \frac{2^7 \cdot 7^6}{2^5 \cdot 7^5} = \frac{2^2 \cdot 7}{1 \cdot 1} = 4 \cdot 7 = (28)$

N3. 100 руб - 100%
 x - 120%

1) $x = \frac{100 \cdot 120}{100} = 120 \text{ (руб.)}$

2) $1100 : 120 = 9\frac{20}{120} = 9\frac{1}{6}$ (ц)
 можно купить 9 ц и останется 20 рублей.

Ответ: (9) ц.

N4

$S = \frac{1}{2} bc \sin \alpha$

$S = \frac{1}{2} \cdot \frac{14}{1} \cdot \frac{16}{1} \cdot \frac{1}{2} = 14 \cdot 2 = (28)$

Найдите значение выражения:

N5. $(2\sqrt{19} - \sqrt{2}) \cdot (2\sqrt{19} + \sqrt{2}) = (2\sqrt{19})^2 - (\sqrt{2})^2 = 4 \cdot 19 - 2 = 76 - 2 = (74)$

N6

1) $\begin{array}{r} 72611 \\ - 72452 \\ \hline 159 \end{array}$ (к.)

2) $\begin{array}{r} 159 \\ \times 1,7 \\ \hline 1113 \\ + 159 \\ \hline 270,3 \end{array}$ (руб)

Ответ: (270,3) руб

N7 Найдите корень уравнения:

$\frac{1}{3x-11} = \frac{1}{4x+11}$

$(3x-11) \cdot (4x+11) \cdot \left| \begin{array}{l} \text{Умножаем это на } x = -22 \\ (3x-11) \cdot (4x+11) \neq 0 \end{array} \right.$

$4x+11 = 3x-11$
 $4x-3x = -11-11$
 $x = -22$

Ответ: (-22)

N8

1) $\begin{array}{r} 4,2 \\ \times 5 \\ \hline 21,0 \end{array}$ (м²)

2) $\begin{array}{r} 21,0 \\ - 20,6 \\ \hline 0,4 \end{array}$ (м²)

Ответ: (0,4) м²

N9

2 1 4 3

N 10

1) $4+6+6+9 = 25$

2) $6 : 25 = 0,24$ Ответ: (0,24)

N 11 Jawab: (8)

N 12 1) $\frac{12500 \cdot 7}{100} = 875 \text{ (mys)}$ 2) $\frac{22000 \cdot 2}{100} = 440 \text{ (mys)}$

3) $\frac{19000 \cdot 3}{100} = 570 \text{ (mys)}$ 4) $\frac{14000 \cdot 5}{100} = 700 \text{ (mys)}$

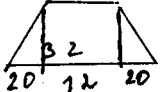
Jawab: (875)

N 13 1) $DB = \sqrt{AD^2 + AB^2} = \sqrt{2^2 + 2^2} = \sqrt{8}$

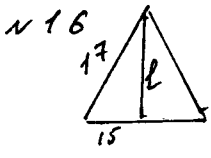
2) $DB_1 = \sqrt{DB^2 + BB_1^2} = \sqrt{8 + 1} = \sqrt{9} = 3$ Jawab: (3)
atau $d^2 = 2^2 + 2^2 + 1^2 = 9$; $d = 3$.

N 14 4 2 13

N 15 1) $AE = 32$, $BE = 20$, maka $DC = AE - BE = 32 - 20 = 12$



2) $\frac{DC + AB}{2} = \frac{12 + 52}{2} = \frac{64}{2} = 32$ Jawab: (32)



$l^2 = 17^2 - 15^2$

$l = \sqrt{(17-15)(17+15)} = \sqrt{2 \cdot 32} = \sqrt{64} = 8$ no m. Pengukuran

$S_{\Delta} = \frac{1}{2} \cdot 15 \cdot 8 = 60$
 $S_{\text{sekitar}} = 2 \cdot 20 \cdot 30 = 900$

$S_n = 900 + 60 = 960$

Jawab: (960)

N 17 (3241)

N 18 (34)

N 19 (841)

N 20 $\begin{cases} 3z = 4c + 1u \\ 7c = 4z + 1u \end{cases}$ $\begin{cases} 3z = 4c + 1u \quad | \cdot 4 \\ -4z = -7c + 1u \quad | \cdot 3 \end{cases} + \begin{cases} 12z = 16c + 4u \\ -12z = -21c + 3u \end{cases}$

$-5c + 7u = 0$
 $7u = 5c \quad | \cdot 6$
 $42u = 30c$

Jawab: (30)