

A 1. Вариант

1) $1 + \frac{1}{8} = 1\frac{1}{8} = \frac{9}{8}$

2) $\frac{9}{10} : \frac{9}{8} = \frac{9}{10} \cdot \frac{8}{9} = \frac{8}{10} = \frac{4}{5} = 0,8$

2) $\sqrt{17} = 4, \dots$ $A = \sqrt{17}$

$193 \overline{) 17}$
 $\underline{11,35}$

3) $4 (\sqrt{7})^2 = 7$

4) $2x + 2 = -3$
 $2x = -5$
 $x = -2,5$

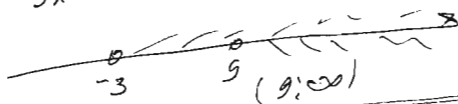
5) 2 3 1

6) $a_1 = 8$ $d = 2$ a_6
 $a_6 = a_1 + 5d = 8 + 5 \cdot 2 = 18$

7) $\frac{7b^2 + 2a - 7b^2}{b} = \frac{2a}{b}$

$\frac{2 \cdot 9}{18 \cdot 2} = \frac{18}{12 \cdot 2} = \frac{3}{2} = 1,5$

8) $\begin{cases} 3x > -9 & x > -\frac{9}{3} \\ -3x < -21-6 & x > \frac{-27}{-3} \end{cases} \begin{cases} x > -3 \\ x > 9 \end{cases}$



ответ: 3.

9) $\frac{180}{125} - \frac{55+55=110}{55}$
 $\frac{180-110}{55} = \frac{70}{55}$

10) $12 : 2 = 6$

$6^2 + 8^2 = 36 + 64 = 100$
 $r = 10$ $d = 20$

11) $70 + 44 = 114$
 $\frac{114 + 12}{2} \cdot 24 = \frac{126}{2} \cdot 24$
 $\frac{126 \cdot 24}{2} = \frac{3024}{2} = 1512$

12) $\lg B = \frac{7}{2} = 3,5$

13) 2 3

14) 2

15) 9

16) $B = 180$
и. 90

$\frac{180}{8} = \frac{24}{90}$
 $\frac{1440}{2160}$
 $\frac{2160}{3600}$

17) $\frac{x+1,7}{2} = 2,1$

$x + 1,7 = 4,2$
 $x = 4,2 - 1,7$
 $x = 2,5$

$\frac{4,2}{-1,7}$
 $\frac{2,5}{5}$

18) 3

19) $1 + 12 + 3 = 16$

$\frac{12}{16} = \frac{3}{4} = 0,75$ $\frac{3}{4} = 0,75$
 $\frac{28}{20}$

20) $T = 2\sqrt{e}$

$\sqrt{e} = \frac{T}{2} = \frac{13}{2} = 6,5$

$e = 6,5^2 = 42,25$

1) $\frac{4}{5}$ или 0,8

2) 1

3) ~~4~~

4) -2,5

5) 231

6) 18

7) 1,5

8) 3

9) 70

10) 20

11) 1512

12) 3,5

13) 23

14) 2

15) 9

16) 3600

17) 2,5

18) 3,4

19) 0,75

20) 42,25

(3,4)

A II B

1) $1 + \frac{1}{6} = 1\frac{1}{6} = \frac{7}{6}$
 $\frac{7}{10} \cdot \frac{7}{6} = \frac{7}{10} \cdot \frac{6}{7} = \frac{6}{10} = 0,6$

2)
$$\begin{array}{r} 165 \overline{) 115} \\ 15 \overline{) 11} \\ \underline{75} \\ 40 \end{array}$$

3) $(\sqrt{6})^2 = 6$

4) $10x + 1 = -8$
 $10x = -9$
 $x = -\frac{9}{10}$
 $x = -0,9$

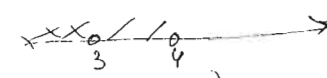
5) 3 12

6) $a_1 = -3$ $d = 3$ $a_5 = ?$
 $a_5 = -3 + 4d = -3 + 4 \cdot 3 = 9$

7)
$$\frac{6b^2 + 7a - 6b^2}{8} = \frac{7a}{8}$$

$$\frac{7 \cdot 152}{567} = 2$$

8)
$$\begin{cases} -9 + 3x < 0 \\ 2 - 3x > -10 \end{cases} \begin{cases} 3x < 9 \\ -3x > -12 \end{cases} \begin{cases} x < 3 \\ x < 4 \end{cases}$$


 $(-\infty; -3)$

(3)

9)
$$\begin{array}{r} 180 \\ -121 \\ \hline 59 \end{array} \quad \begin{array}{r} 59 \\ 118 \\ \hline 177 \end{array} \quad \begin{array}{r} 180 \\ -118 \\ \hline 62 \end{array}$$

10) $R^2 = 12^2 + 16^2 = 144 + 256 = 400$
 $R = 20$ $d = 40$

11)
$$\frac{64}{170} + \frac{110}{32} = \frac{110+32}{2} = 48$$

$$\begin{array}{r} 48 \\ 71 \\ \hline 48 \\ 336 \\ \hline 3408 \end{array}$$

12) $\text{tg} C = \frac{3}{4} = 0,75$
 13) 13

14) 1

15) 2 u.

16) $B = 248p$
 $u. = 124p$

$$\begin{array}{r} 248 \\ 496 \\ \hline 372 \\ 868 \end{array}$$

17) $\frac{x+2,5}{2} = 2,2$
 $x+2,5 = 4,4$
 $x = 4,4 - 2,5 = 1,9$

18) 1 3 4

$$\begin{array}{r} 45 \\ 15 \\ \hline 30 \\ 45 \\ \hline 75 \end{array}$$

 $\frac{30}{45} = \frac{2}{3}$

19) $4 + 5 + 21 = 30$
 $\frac{21}{30} = \frac{7}{10} = 0,7$

20) $\sqrt{T} = 2\sqrt{e}$
 $\sqrt{e} = \frac{T}{2}$
 $\sqrt{e} = \frac{9}{2}$
 $e = 4,5^2 = 20,25$

- 1) 0,6
- 2) 1
- 3) 3
- 4) -0,9
- 5) ~~0,75~~ 3 12
- 6) 9
- 7) 2
- 8) 3
- 9) 62
- 10) 40
- 11) 34 08
- 12) ~~0,75~~ 0,75
- 13) 13
- 14) 1
- 15) 2
- 16) 868p.
- 17) 1,9
- 18) 13 4
- 19) 0,7
- 20) 20,25