

$$2.003. \frac{(\sqrt{a^2 + a\sqrt{a^2 + b^2}} - \sqrt{a^2 - a\sqrt{a^2 - b^2}})^2}{2\sqrt{a^3b}} \left(\sqrt{\frac{a}{b}} + \sqrt{\frac{b}{a}} - 2 \right)$$

$$2.008. \left(\left(\frac{2^{\frac{3}{2}} + 27y^{\frac{3}{5}}}{\sqrt{2} + 3\sqrt[5]{y}} + 3\sqrt[10]{32y^2} - 2 \right) 3^{-2} \right)^5$$

$$2.014. \frac{x-y}{x^{\frac{3}{4}} + x^{\frac{1}{2}}y^{\frac{1}{4}}} * \frac{x^{\frac{1}{2}}y^{\frac{1}{4}} + x^{\frac{1}{4}}y^{\frac{1}{2}}}{x^{\frac{1}{2}} + y^{\frac{1}{2}}} * \frac{x^{\frac{1}{4}}y^{-\frac{1}{4}}}{x^{\frac{1}{2}} - 2x^{\frac{1}{4}}y^{\frac{1}{4}} + y^{\frac{1}{2}}}$$

$$2.018. \left(\frac{1+x+x^2}{2x+x^2} + 2 - \frac{1-x+x^2}{2x-x^2} \right)^{-1} (5-2x^2); x = \sqrt{3,92}$$

$$2.025. \frac{a^3 - a - 2b - b^2 a^{-1}}{\left(1 - \sqrt{\frac{1}{a} + \frac{b}{a^2}}\right)(a + \sqrt{a+b})} : \left(\frac{a^3 + a + ab + ba^2}{a^2 - b^2} + \frac{b}{a-b} \right)$$

$$a = 23b = 22$$

$$2.028. \frac{x(x^2 - a^2)^{\frac{1}{2}} + 1}{a(x-a)^{-\frac{1}{2}} + (x-a)^{\frac{1}{2}}} : \frac{a^2 \sqrt{x+a}}{x - (x^2 - a^2)^{\frac{1}{2}}} + \frac{1}{x^2 + ax}$$

$$2.034.1-\frac{\frac{1}{\sqrt{a-b}}-\sqrt{a+1}}{\frac{1}{\sqrt{a+1}}-\frac{1}{\sqrt{a-1}}};\frac{\sqrt{a+1}\sqrt{a^2-1}}{(a-1)\sqrt{a+1}-(a+1)\sqrt{a-1}}$$

$$2.036.(\sqrt[4]{36mn^2p}+m\sqrt{\frac{3n}{m}}+\sqrt{3pn})(\sqrt[4]{36mn^2p}-\sqrt{mn}-p\sqrt{\frac{3n}{p}})$$

$$2.039.\frac{9b^{\frac{4}{3}}-\frac{a^{3/2}}{b^2}}{\sqrt{a^{3/2}*2b^{-2}+6a^{3/4}b^{-1/3}+9b^{4/3}}}\ast\frac{b^2}{a^{3/4}-3b^{5/3}};b=4$$

$$2.040.\frac{\frac{1}{a}-\frac{1}{b+c}}{\frac{1}{a}+\frac{1}{b+c}}\left(1+\frac{b^2+c^2-a^2}{2bc}\right):\frac{a-b-c}{abc};a=0,02,b=-11,05,c=1,07$$

$$2.048.\frac{(2p-q)^2+2q^2-3pq}{2p^{-1}+q^2}:\frac{4p^2-3pq}{2+pq^2};p=0,78,q=\frac{7}{25}$$

$$2.058.\left(\frac{1}{a}+\frac{1}{b+c}\right):\left(\frac{1}{a}-\frac{1}{b+c}\right):\left(1+\frac{b^2+c^2-a^2}{2bc}\right);a=1\frac{33}{40},b=0,625,c=3,2$$

$$2.069. \frac{a^{7/3} - 2a^{5/3}b + a^{2/3}b^{4/3}}{a^{5/3} - a^{4/3}b^{1/3} - ab^{2/3} + a^{2/3}b} : a^{1/3}$$

$$2.079. (\sqrt{\sqrt{m} - \sqrt{\frac{m^2 - a}{m}}} + \sqrt{\sqrt{m} + \sqrt{\frac{m^2 - a}{m}}}) : \sqrt[4]{\frac{m^2}{4}}$$

$$2.085. \left(\frac{a\sqrt{a} + b\sqrt{b}}{\sqrt{a} + \sqrt{b}} - \sqrt{ab} \right) \left(\frac{\sqrt{a} + \sqrt{b}}{a - b} \right)^2$$

$$2.097. \frac{(\sqrt{x} + 2) \left(\frac{2}{\sqrt{x}} - 1 \right) - (\sqrt{x} - 2) \left(\frac{2}{\sqrt{x}} + 1 \right) - \frac{8}{\sqrt{x}}}{(2 - \sqrt{x + 2}) : \left(\sqrt{\frac{2}{x} + 1} - \frac{2}{\sqrt{x}} \right)}$$

$$2.114. \left(\frac{9 - 4a^{-2}}{3a^{-1/2} + 2a^{-3/2}} - \frac{1 + a^{-1} - 6a^{-2}}{a^{-1/2} + 3a^{-3/2}} \right)^4$$

$$2.121. \sqrt[4]{32\sqrt[3]{4}} + \sqrt[4]{64\sqrt[3]{\frac{1}{2}}} - 3\sqrt[3]{2\sqrt[4]{2}}$$

$$2.127. \left(\sqrt{3 - \sqrt{5}} \right) * (3 + \sqrt{5}) (\sqrt{10} - \sqrt{2}) = 8$$

$$2.158. \sqrt[4]{(1 - 2a + a^2)(a^2 - 1)(a - 1)} : \frac{a^2 + 2a - 3}{\sqrt[4]{a + 1}}$$

$$2.160. \frac{\left(a^2 b \sqrt{b} - 6a^{5/3} b^{5/4} + 12ab \sqrt[3]{a} - 8ab^{3/4} \right)^{2/3}}{ab \sqrt[3]{a} - 4ab^{3/4} + 4a^{2/3} \sqrt{b}}$$

$$2.164. \frac{x^2 + 2x - 3 + (x+1)\sqrt{x^2 - 9}}{x^2 - 2x - 3 + (x-1)\sqrt{x^2 - 9}}; x \geq 3$$

$$2.177. \frac{2x - x|x-1| + x|x| + 3}{|x| + x^2}$$

$$2.171. \frac{\frac{x+y}{\sqrt{x}-\sqrt{y}} - \frac{x-y}{\sqrt{x}+\sqrt{y}}}{\frac{\sqrt{x}-\sqrt{y}}{x+y} + \frac{\sqrt{x}+\sqrt{y}}{x-y}} * \frac{y-\sqrt{xy}+x}{2\sqrt{xy}}$$

$$2.182. \frac{(ab(x^2 + y^2) + xy(a^2 + b^2))((ax + by)^2 - 4abxy)}{ab(x^2 - y^2) + xy(a^2 - b^2)}$$

$$2.193. \frac{\sqrt{\sqrt{3}+2} * \sqrt[4]{7-4\sqrt{3}} + \sqrt[3]{\sqrt{x}(x+27)} - 9x - 27}{\sqrt{x} - 2 - \sqrt{2-\sqrt{3}} * \sqrt[4]{7+4\sqrt{3}}}$$

$$2.196. \frac{|x^2 - 1| + x^2}{2x^2 - 1} - \frac{|x - 1|}{x - 1}$$

$$2.225. \left(x^2 - 6x + 1 + \left(\frac{\frac{x-3}{1+3x} - \frac{x-5}{1+5x}}{\frac{(x-5)(x-3)}{(1-5x)(1+3x)} + 1} \right)^{-1} \right)^{1/2}$$

A grup

$$6.007 \frac{x^2}{a^3} + \frac{b^3}{x^2} = \frac{b}{a} + \frac{b^2}{a^2}$$

$$6.011 \frac{x-2}{x-1} + \frac{x+2}{x+1} = \frac{x-4}{x-3} + \frac{x+4}{x+3} - \frac{28}{15}$$

$$6.015 \frac{7(x-2)(x-3)(x-4)}{(2x-7)(x+2)(x-6)} = -2$$

$$6.018 x^2 + x + x^{-1} + x^{-2} = 4(x + x^{-1} = z)$$

$$6.030. \left(\frac{x^2+6}{x^2-4} \right)^2 = \left(\frac{5x}{4-x^2} \right)^2$$

$$6040. \sqrt[3]{24+\sqrt{x}} - \sqrt[3]{5+\sqrt{x}} = 1$$

$$6.043. \sqrt{x^2+32} - 2\sqrt[4]{x^2+32} = 3$$

$$6.036 \sqrt{3x+7} - \sqrt{x+1} = 2$$

$$6.054. \sqrt{5+\sqrt[3]{x}} + \sqrt{5-\sqrt[3]{x}} = \sqrt[3]{x}$$

$$6.062 \sqrt{3x^2+1} + \sqrt{x^2+3} = \sqrt{6x^2+10}$$

$$6.067 \begin{cases} (x+0,2)^2 + (x+0,2)^2 = 1 \\ x+y=0,9 \end{cases}$$

$$6.075 \begin{cases} x^2y + xy^2 = 6 \\ xy + x + y = 5 \end{cases}$$

$$6.095 \begin{cases} 3x+2y+2z=13 \\ 2x+3y+2z=14 \\ 2x+2y+3z=15 \end{cases}$$

$$6.109. \begin{cases} \sqrt[3]{x} + \sqrt[3]{y} = 4 \\ x+y=28 \end{cases}$$

$$6.114. \begin{cases} y\sqrt{2x} - x\sqrt{2y} = 0 \\ xy^2 - x^2y = 30 \end{cases}$$

B grup

$$6.159. \sqrt{x+2} - \sqrt[3]{3x+2} = 0$$

$$6.163. 5\sqrt[15]{x^{22}} + \sqrt[15]{x^{14}}\sqrt{x} - 22\sqrt[15]{x^7} = 0$$

$$6.167. \sqrt{x^2+x+4} + \sqrt{x^2+x+1} = \sqrt{2x^2+2x+9}$$

$$6.169. \sqrt{x} + \frac{2x+1}{x+2} = 2$$

$$6.175. \sqrt[3]{x-1} + \sqrt[3]{x-2} - \sqrt[3]{2x-3} = 0$$

$$6.178. \frac{\sqrt{(a-x)^2} + \sqrt{(a-x)(b-x)} + \sqrt{(b-x)^2}}{\sqrt{(a-x)^2} - \sqrt{(a-x)(b-x)} + \sqrt{(b-x)^2}} = \frac{7}{3}$$

$$6.182. |x|^3 + |x-1|^3 = 9$$

$$6.183. \begin{cases} xy(x+1)(y+1) = 72 \\ (x-1)(y-1) = 2 \end{cases}$$

$$6.185. \begin{cases} x^2 + 2y^2 = 17 \\ x^2 - 2xy = -3 \end{cases}$$

$$6.195. \begin{cases} x^2 + y^2 - 2x + 3y - 9 = 0 \\ 2x^2 + 2y^2 + x - 5y - 1 = 0 \end{cases}$$

$$6.199. \begin{cases} \frac{x-1}{2} = \frac{y+3}{3} = \frac{z-1}{4} \\ 2x + 3y - 5z + 19 = 0 \end{cases}$$

$$6.201. \begin{cases} \frac{4}{x+y-1} - \frac{5}{2x-y+3} + \frac{5}{2} = 0 \\ \frac{3}{x+y-1} + \frac{1}{2x-y+3} + \frac{7}{5} = 0 \end{cases}$$

$$6.205. \begin{cases} \frac{3}{x^2 + y^2 - 1} + \frac{2y}{x} = 1 \\ x^2 + y^2 + \frac{4x}{y} = 22 \end{cases}$$

$$6.207 \begin{cases} x + y + z = 6 \\ x(y + z) = 5 \\ y(x + z) = 8 \end{cases}$$

$$6.222 \begin{cases} \sqrt{\frac{x+1}{x+y}} + \sqrt{\frac{x+y}{x+1}} = 2 \\ \sqrt{\frac{x+1}{x+2}} - \sqrt{\frac{y+2}{x+1}} = 1,5 \end{cases}$$

$$6.224 \begin{cases} \sqrt{x+y} + \sqrt{y+z} = 3 \\ \sqrt{y+z} + \sqrt{z+x} = 5 \\ \sqrt{x+z} + \sqrt{y+x} = 4 \end{cases}$$

$$6.224 \begin{cases} \sqrt{x+y} + \sqrt{y+z} = 3 \\ \sqrt{y+z} + \sqrt{z+x} = 5 \\ \sqrt{x+z} + \sqrt{y+x} = 4 \end{cases}$$

$$6.231 \begin{cases} \sqrt{x+y} + \sqrt{2x+y+2} = 7 \\ 3x+2y = 23 \end{cases} \quad 6.235. \begin{cases} \sqrt[3]{\frac{y+1}{x}} - 2\sqrt[3]{\frac{x}{y+1}} = 1 \\ \sqrt{x+y+1} + \sqrt{x-y+10} = 5 \end{cases}$$

$$6.235. \begin{cases} \sqrt[3]{\frac{y+1}{x}} - 2\sqrt[3]{\frac{x}{y+1}} = 1 \\ \sqrt{x+y+1} + \sqrt{x-y+10} = 5 \end{cases}$$

$$7.021. 3\log_5 2 + 2 - x = \log_5 (3^x - 5^{2-x})$$

$$7.023. \log_{1-x} 3 - \log_{1-x} 2 - 0,5 = 0$$

$$7.025. \log_2 182 - 2 \log_2 \sqrt{5-x} = \log_2 (11-x) + 1$$

$$7.031. \log_5 (x-2) + \log_{\sqrt{5}} (x^3-2) + \log_{0.2} (x-2) = 4$$

$$7.035. \log_3 (81^x + 3^{2x}) = 3 \log_{27} 90$$

$$7.037. \log_6 (3^{x^2} + 1) - \log_6 (3^{2-x^2} + 9) = \log_6 2 - 1$$

$$7.041. \lg \sqrt{5^{x(13-x)}} + 11 \lg 2 = 11$$

$$7.043. \lg (81 \sqrt[3]{3^{x^2-8x}}) = 0$$

$$7.048. \dots 0.5 (\lg (x^2 - 55 + 90) - \lg (x - 36)) = \lg \sqrt{2}$$

$$7.059. \sqrt{3} * 3^{\frac{x}{1+\sqrt{x}}} * \left(\frac{1}{3}\right)^{\frac{2+\sqrt{x+x}}{2(1+\sqrt{x})}} = 81$$

$$7.051. \frac{\lg 8 - \lg (x-5)}{\lg \sqrt{x+7} - \lg 2} = -1$$

$$7.055. \log_3 (3^x - 8) = 2 - x$$

$$7.059. \sqrt{3} * 3^{\frac{x}{1+\sqrt{x}}} * \left(\frac{1}{3}\right)^{\frac{2+\sqrt{x+x}}{2(1+\sqrt{x})}} = 81$$

$$7.069. \log_{\sqrt{5}} (4^x - 6) - \log_{\sqrt{5}} (2^x - 2) = 2$$

$$7.080. \lg (\sqrt{6+x} + 6) = \frac{2}{\log_{\sqrt{x}} 10}$$

$$7.090. 27^{\lg x} - 7 * 9^{\lg x} - 9^{\lg x} - 21 * 3^{\lg x} + 27 = 0$$

$$7.094. 4^{\log_5 x^2} - 4^{\log_5 x+1} + 4^{\log_5 x-1} - 1 = 0$$

$$7.099. \lg (3-x) - \frac{1}{3} \lg (27-x^3) = 0$$

$$7.109. 5^{2x-1} - 2^{2x} - 5^{2x} + 2^{2x+2} = 0$$

$$7.113. x^{\lg x} = 1000x^2$$

$$7.119. 4^{2 \log_8 (2x-2)} * 0.25^{\log_8 (2x+3)} = \sqrt[3]{16}$$

$$7.152. \log_2 (2^{x^2}) + \log_2 x * x^{\log_x (\log_2 x+1)} + \frac{1}{2} \log_4^2 x^4 + 2^{3 \log_{0.5} \log_2 x}$$

$$7.166. \sqrt{\log_{0.04} x + 1} + \sqrt{\log_{0.2} x + 3} = 1$$

$$7.170. \log_2(2 - x) - \log_2(2 - \sqrt{x}) = \log_2 \sqrt{2 - x} - 0,5$$

$$7.188. \sqrt{\log_5^2 x + \log_x^2 5 + 2} = 2,5$$

$$7.200. \frac{1 + 2 \log_9 2}{\log_9 x} - 1 = 2 \log_x 3 * \log_9(12 - x)$$

$$7.090. 27^{\lg x} - 7 * 9^{\lg x} - 9^{\lg x} - 21 * 3^{\lg x} + 27 = 0$$

$$7.222. 3 * 16^x + 2 * 81^x = 5 * 36^x$$

$$7.232. \log_{x^2} 16 + \log_{2x} 64 = 3$$

$$7.237. 4 \log_4^2(-x) + 2 \log_4 x^2 = -1$$

$$7.240. \lg^4(x-1)^2 + \lg^2(x-1)^3 = 25$$

$$7.245. \log_{1-x}(2x^3 + 2x^2 - 3x + 1) = 3$$

$$7.247. \sqrt{\log_5 x} + \sqrt[3]{\log_5 x} = 2$$

$$7.119. 4^{2 \log_8(2x-2)} * 0.25^{\log_8(2x+3)} = \sqrt[3]{16}$$

A guruh

$$9.019. y = \sqrt{\log_{0.3} \log_3 \frac{x+1}{x-1}}$$

$$9.021. y = \sqrt{5 - x - \frac{6}{x}}$$

Tengsizlikni yeching (9.022-3.035):

$$9.025. \log_{\pi}(x + 27) - \log_{\pi}(16 - 2x) < \log_{\pi} x$$

$$9.029. \frac{1}{3x-2-x^2} - \frac{3}{7x-4-3x^2} > 0$$

$$9.032. |2x^2 - 9x + 15| \geq 20.$$

$$9.034. 5x - 20 \leq x^2 \leq 8x.$$

$$9.036. \frac{\log_{0.3}\left(\frac{10}{7}(\log_2 5 - 1)\right)}{(x-8)(2-x)} > 0.$$

$$9.044. \frac{\sqrt{17-15x-2x^2}}{x+3} > 0.$$

$$9.049. \lg 10^{\lg(x^2+21)} > 1 + \lg x.$$

$$9.052. 2^{1-2^{\frac{1}{x}}} < 0.125$$

$$9.054. 5^{2x+1} > 5^x + 4.$$

$$9.061. 25^x < 6 \cdot 5^x - 5$$

$$9.064. \left(\frac{2}{7}\right)^{3(2x-7)} \cdot 12 \cdot 25^{\frac{4x+1}{2}} \geq 1$$

$$9.066. 0.64 < \sqrt{0.8^{x(x-3)}} < 1$$

$$9.070. \log_{1.5} \frac{2x-8}{x-2} < 0$$

B grup

$$9.123. y = \frac{\sqrt{4x-x^2}}{\log_3|x-4|}$$

$$9.125. y = \sqrt{\log_{1/3} \log_3|x-3|}$$

$$9.127. y = \sqrt[4]{2 - \lg|x-2|}$$

$$9.133. \frac{|x+2|-|x|}{\sqrt{4-x^3}} > 0$$

$$9.137. \log_2^4 x - \log_{0.5}^2 \frac{x^3}{8} + 9 \log_2 \frac{32}{x^2} < 4 \log_{0.5}^2 x$$

$$9.141. \sqrt{9^x - 3^{x+2}} > 3^x - 9$$

$$9.143. \sqrt{x+3} < \sqrt{x-1} + \sqrt{x-2}.$$

$$9.148. \frac{x^4+3x^3+4x^2-8}{x^2} < 0.$$

$$9.150. \frac{\log_{0.3}|x-2|}{x^2-4x} < 0.$$

$$9.154. \frac{2-x}{x^3+x^2} > \frac{1-2x}{x^3-3x^2}.$$

$$9.159. 2 \log_3 \log_3 x + \log_{1/3} \log_3 (9^{\sqrt[3]{x}}) \geq 1.$$

$$9.164. \log_3 \log_4 \frac{4x-1}{x+1} - \log_{1/3} \log_{1/4} \frac{x+1}{4x-1} < 0.$$

$$9.168. \sqrt{\frac{1}{x^2} - \frac{3}{4}} < \frac{1}{x} - \frac{1}{2}.$$

$$9.172. (x-3)\sqrt{x^2+4} \leq x^2-9.$$

$$9.175. \log_{0.2} x + \log_4 x > 1.$$

$$9.178. x^{0.5 \log_{0.5} x - 3} \geq 0.5^{3 - 2.5 \log_{0.5} x}.$$

$$9.184. \log_{0.25} \left| \frac{2x+1}{x+3} + \frac{1}{2} \right| > \frac{1}{2}.$$

$$9.189. \log_5 \sqrt{3x+4} \cdot \log_x 5 > 1.$$

$$9.192. \sqrt{x^2+3x+4} > -2.$$

$$9.195. \log_3 \log_{x^2} \log_{x^2} x^4 > 0.$$

$$9.201. \frac{1}{\log_2(x-1)} < \frac{1}{\log_2 \sqrt{x+1}}.$$

$$9.203. 5^{\log_5^2 x} + x^{\log_5 x} < 10.$$

$$9.208. \sqrt{x^2-9x+20} \leq \sqrt{x-1} \leq \sqrt{x^2-13}.$$

$$9.209. \begin{cases} \frac{x^2+4}{x^2-16x+64} > 0, \\ \lg \sqrt{x+7} > \lg(x-5) - 2 \lg 2. \end{cases}$$

$$9.213. \begin{cases} |x^2 + 5x| < 6, \\ |x + 1| \leq 1. \end{cases}$$

A topar

10.02. Ultanlari 20 hám 12 sm bolgan teń qaptallı trapeciyaga. Sırtlay sıızılğan sheńberdiń orayınıń úlken ultanda jatatuǵını belgili bolsa, trapeciyanıń diagonalın hám qaptal tárepın tabıń.

10.04. Rombtıń doǵal múyeshinen ótkerilgen biyikligi onıń tárepın súyir múyesh tóbesinen esaplaganda, m hám n uzınlıqtaǵı kesindilerge bóledi. Rombtıń diagonalların anıqlań.

10.06 Radiusları $R = 3$ sm hám $r = 1$ sm bolgan sheńberler sırtınan urınadı. Sheńberlerdiń tiyiw noqatınan olardıń ulıwma urınbalarına shekemgi qashıqlıqlardı tabıńız.

10.08 Qaptal tárepi 4 sm ge teń bolgan teń qaptallı úshmúyeshliktiń qaptal tárepine mediana ótkerilgen. Eger mediananıń uzınlıǵı 3 sm ge teń bolsa, úshmúyeshliktiń ultanın tabıń.

10.010 Duris úshmúyeshliktiń hár bir tárepi úshewden teń bólekke bólingen hám sáykes bóliniw noqatları bir-birin menen bir baǵıtta esaplaganda óz-ara tutastırılǵan. Payda bolg'an duris úshmúyeshlikke radiusı $r = 6$ sm bolgan sheńber ishine sıızılǵan. Úshmúyeshliktiń táreplerin anıqlań.

10.012 Sheńberde jatpaytuǵın A noqattan urınba hám kesiwshi ótkerilgen. A dan uriniw noqatına shekem bolgan aralıq 16 sm ge teń. A noqattan kesiwshiniń sheńber menen kesilisiw noqatlarınan birine shekemgi aralıq 32 sm ge teń. Eger kesiwshi sheńberdiń orayınan 5 sm uzaqlıqta bolsa, onıń radiusın tabıń.

10.014. Sheńberdin xordası 10 sm ge teń. Xordanıń bir tóbesinen sheńberge urınba, ekinshisinen bolsa urınbaǵa parallel bolǵan kesiwshi ótkerilgen. Eger kesiwshiniń sheńber ishindegi kesindisi 12 sm ge teń bolsa, sheńberdin radiusın tabıń.

10.016. Múyeshi 90° hám radiusı R bolgan AOB sektorga OA , OB kesindilerge hám AB dogaga urınıwshı sheńber ishley sıızılǵan. Sheńber radiusın tabıń.

10.018. Agar ABC uchburchakda $BC = 8$ sm, AC va BC tomonlarga o'tkazılǵan balandliklarning uzunlıkları mos ravishda 6,4 ham 4 sm ga teng bo'lsa, AB va AC tomonlarning uzunlıklarını toping.

10.020 Eki teń dóńgelektiń kesilisiwine diagonalları 12 hám 6 sm bolgan romb ishley sıızılǵan. Sheńberlerdiń radiusların tabıń.

10.022 Eger tuwri múyeshli úshmúyeshliktiń gipotenuzasına júrgizilgen mediana tuwri múyeshli 1:2 qatnasta bolsa, úshmúyeshliktiń súyir múyeshlerin anıqlań.

10.024. Trapeciyaniń parallel tárepleri uzınlıqları 25 hám 4 sm ge, parallel bolmagan tárepleriniń uzınlıqları bolsa 20 hám 13 sm ge teń. Trapeciyaniń biyikligin tabıń.

10.026 Sheńber sırtındaǵı noqattan, ogan uzınlıǵı 12 sm bolgan kesiwshi hám uzınlıǵı kesiwshiniń sheńber ishindegi kesindisiniń bólegine teń bolgan urinba ótkerilgen. Urınbanıń uzınlıǵın tabıń.

10.028 Teń qaptallı trapeciyaniń ultanları a hám b ga, qaptal tárepi e ge, diagonalı bolsa d ga teń. $d^2 = ab + c^2$ ekenligin dálilleń.

10.030 Kvadratqa sırtlay etip, onıń táreplerine tuwrı múyeshli úshmúyeshlikler jasalgan hám olardıń tóbeleri izbe-iz tutastırılǵan. Payda bolgan tórtmúyeshlik perimetriniń berilgen kvadrat perimetrine qatnasın anıqlań.

10.032 Úshmúyeshliktiń eki tárepiniń uzınlıqları 6 sm hám 3 sm ekenligi belgili. Eger berilgen táreplerge ótkerilgen bolsa biyiklikler qosındısınıń yarımı úshinshi biyiklikke teń bolsa, úshmúyeshliktiń úshinshi tárepiniń uzınlıǵın tabıń.

10.034 Bir noqattan sheńberge eki urinba ótkerilgen. Hárbir urınbanıń uzınlıǵı 12 sm, urınba noqatları arasındaǵı aralıq bolsa 14,4 sm. Sheńberdin radiusın tabıń.

10.036 Bir múyeshi 60° bolgan tuwrı múyeshli úshmúyeshlikke tárepi 6 sm ge teń bolgan romb sonday etip ishley sızılǵan, 60° li múyesh olar ushın ulıwma, rombtıń barlıq múyeshleri tóbeleri úshmúyeshliktiń táreplerinde jatadı. Úshmúyeshliktiń táreplerin tabıń.

10.038 Parallelogramnıń perimetri 90 sm ge teń, súyir múyeshi 60° . Parallelogramnıń diagonalı onıń dogal múyeshin 1:7 qatnasta bóledi. Parallelogramnıń táreplerin tabıń.

10.040 Tuwrı múyeshli úshmúyeshlikke yarım sheńber sonday ishine sızılǵan, diametr gipotenuza ústinde jatadı, al oray bolsa gipotenuzanı 15 hám 20 sm li kesindilerge bóledi. Úshmúyeshliktiń maydanın hám ishley sızılǵan yarım sheńberdin uzınlıǵın tabıń.

10.042

