

10. domácí úkol – týden od 28. 11. do 5. 12. 2017

Termín odevzdání: 5. 12. 2017

$$\frac{5}{6} + \frac{7}{9} = \frac{15+14}{18} = \frac{29}{18} = 1 \frac{11}{18}$$

$$\frac{3}{4} - \frac{2}{5} = \frac{15-8}{20} = \frac{7}{20}$$

$$\frac{5}{6} - \frac{5}{9} = \frac{15-10}{18} = \frac{5}{18}$$

$$\frac{2}{3} + \frac{5}{6} + \frac{8}{9} = \frac{12+15+16}{18} = \frac{43}{18} = 2 \frac{7}{18}$$

$$\frac{9}{10} + \frac{1}{6} + \frac{7}{12} + \frac{4}{5} = \frac{54+10+35+48}{60} = \frac{147}{60} = 2 \frac{27}{60} = 2 \frac{9}{20}$$

$$2 - \frac{3}{7} = \frac{14-3}{7} = \frac{11}{7} = 1 \frac{4}{7}$$

$$\frac{15}{2} - 4 = \frac{15-8}{2} = \frac{7}{2} = 3 \frac{1}{2}$$

$$\left(\frac{6}{7} + \frac{5}{14}\right) - \left(\frac{10}{21} - \frac{1}{3}\right) = \frac{12+5}{14} - \frac{10-7}{21} = \frac{17}{14} - \frac{3}{21} = \frac{51-6}{42} = \frac{45}{42} = 1 \frac{3}{42} = 1 \frac{1}{14}$$

$$\frac{1}{3} : \left(\frac{1}{4} + \frac{5}{12}\right) = \frac{1}{3} : \frac{3+5}{12} = \frac{1}{3} : \frac{8}{12} = \frac{1}{3} \cdot \frac{12}{8} = \frac{1}{1} \cdot \frac{4}{8} = \frac{4}{8} = \frac{1}{2}$$

$$\left(\frac{7}{4} - \frac{1}{2}\right) : \frac{4}{3} = \frac{7-2}{4} : \frac{4}{3} = \frac{5}{4} \cdot \frac{3}{4} = \frac{15}{16}$$

$$\frac{7}{9} + \frac{2}{3} - \frac{5}{6} = \frac{7}{9} + \frac{3}{2} - \frac{5}{6} = \frac{14+27-15}{18} = \frac{26}{18} = 1 \frac{3}{18} = 1 \frac{1}{6}$$

$$\frac{1}{\frac{1}{3}} = \frac{1}{\frac{1}{3}} \cdot \frac{3}{1} = 3$$

$$\frac{5}{\frac{1}{10}} = \frac{5}{\frac{1}{10}} \cdot \frac{10}{1} = 50$$

$$\frac{14\frac{1}{2}}{2\frac{9}{10}} = \frac{29}{2} : \frac{29}{10} = \frac{29}{2} \cdot \frac{10}{29} = 5$$

$$\frac{\frac{3}{4} + \frac{5}{6}}{\frac{2}{3} - \frac{1}{4}} = \left(\frac{3}{4} + \frac{5}{6}\right) : \left(\frac{2}{3} - \frac{1}{4}\right) = \frac{9+10}{12} : \frac{8-3}{12} = \frac{19}{12} : \frac{5}{12} = \frac{19}{12} \cdot \frac{12}{5} = \frac{19}{5} = 3 \frac{4}{5}$$

$$0,07 + 0,09 = 0,16$$

$$3,18 + 3,12 = 6,3$$

$$8,327 - 4,415 = 3,912$$

$$92,605 + 3,8247 = 96,4297$$

$$642 - (35,6 + 12,839) = 642 - 48,439 = 593,561$$

$$7,062 + 4,55 = 11,612$$

$$(9,614 + 3,5) - (10,1 - 9,827) = 13,114 - 0,273 = 12,841$$

$$2,7 : 0,3 = 9$$

$$0,24 : 0,006 = 40$$

$$7,642 \cdot 23 = 175,766$$

$$2,312 \cdot 42,7 = 98,7224$$

$$(12,32 - 8,4) \cdot 2,9 = 3,92 \cdot 2,9 = 11,368$$

$$6,28 \cdot (3,8 + 6,95) = 6,28 \cdot 10,75 = 67,51$$

$$12,3 + 1,6 \cdot 0,2 = 12,3 + 0,32 = 12,62$$

$$(14,85 + 9,7) \cdot (6,8 - 4,2) = 24,55 \cdot 2,6 = 63,83$$

$$(15,04 - 8,005) \cdot (3,7 - 2,06) = 7,035 \cdot 1,64 = 11,5374$$

Vypočítej obsah čtverců a obdélníků:

1) $a=3,4$ cm, $b=4$ cm

$$S = a \cdot b$$

$$S = 3,4 \cdot 4$$

$$S = 13,6 \text{ cm}^2$$

2) $a=6,8$ dm

$$S = a \cdot a$$

$$S = 6,8 \cdot 6,8$$

$$S = 46,24 \text{ dm}^2$$

3) $a=8,4$ mm

$$S = a \cdot a$$

$$S = 8,4 \cdot 8,4$$

$$S = 70,56 \text{ mm}^2$$

4) $a=5,3$ dm, $b=0,4$ m = 4 dm

$$S = a \cdot b$$

$$S = 5,3 \cdot 4$$

$$S = 21,2 \text{ dm}^2$$

Vypočítej povrch krychlí a kvádrů:

1) $a=7$ cm

$$S = a \cdot a \cdot a$$

$$S = 7 \cdot 7 \cdot 7$$

$$S = 343 \text{ cm}^2$$

2) $a=8$ cm, $b=7$ cm, $c=5$ cm

$$S = 2a \cdot b + 2b \cdot c + 2a \cdot c$$

$$S = 2 \cdot 8 \cdot 7 + 2 \cdot 7 \cdot 5 + 2 \cdot 8 \cdot 5$$

$$S = 112 + 70 + 80 = 262 \text{ cm}^2$$

3) $a=0,03$ m, $b=0,6$ dm, $c=3$ cm

$$a = 3 \text{ cm} \quad b = 6 \text{ cm}$$

$$S = 2 \cdot a \cdot b + 2 \cdot a \cdot c + 2 \cdot b \cdot c$$

$$S = 2 \cdot 3 \cdot 6 + 2 \cdot 3 \cdot 3 + 2 \cdot 6 \cdot 3$$

$$S = 36 + 18 + 36 = 90 \text{ cm}^2$$

4) $a=b=48$ cm, $c=20$ cm

$$S = a \cdot a \cdot 4 + 2 \cdot a \cdot c$$

$$S = 48 \cdot 48 \cdot 4 + 2 \cdot 48 \cdot 20$$

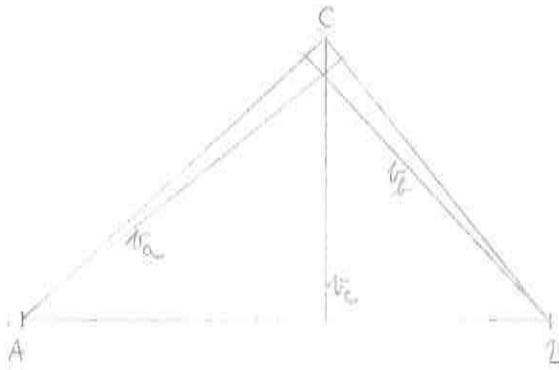
$$S = 9216 + 1920 = 11136 \text{ cm}^2$$

Sestrojte trojúhelník ABC a jeho výšky. $a=4,8$ cm, $b=5,5$ cm, $c=7$ cm. (včetně náčrtku, postupu konstrukce a diskuze)



Postup:

- 1, AB ; $|AB| = 7$ cm
- 2, k_1 ; $k_1(B, r=4,8$ cm)
- 3, k_2 ; $k_2(A, r=5,5$ cm)
- 4, C ; $C \in k_1 \cap k_2$
- 5, $\triangle ABC$



úloha má 1 řešení

Sestrojte trojúhelník KLM a jeho těžnice. $m=8$ cm, $k=4,7$ cm, $|\sphericalangle MKL|=40^\circ$ (včetně náčrtku, postupu konstrukce a diskuze)



úloha nemá řešení