

OPAKOVÁNÍ K TESTU

1) PŘEVEDĚNÍ JEDNOTKY:

$$8,6 \text{ m}^2 = 860 \text{ dm}^2$$

$$1,43 \text{ km}^2 = 143 \text{ ha}$$

$$0,42 \text{ dm}^2 = 42 \text{ cm}^2$$

$$2631 \text{ mm}^2 = 26,31 \text{ cm}^2$$

$$0,7 \text{ ha} = 70 \text{ a}$$

$$43 \text{ km} = 43000 \text{ m}$$

$$1,7 \text{ cm} = 0,17 \text{ dm}$$

$$520 \text{ dm} = 52 \text{ m}$$

$$6740 \text{ mm} = 6,74 \text{ m}$$

$$8,9 \text{ ha} = 890 \text{ a}$$

$$0,4 \text{ m}^2 = 40 \text{ dm}^2$$

$$280 \text{ mm}^2 = 0,0280 \text{ dm}^2$$

$$0,3 \text{ km}^2 = 3000 \text{ a}$$

$$71000 \text{ m}^2 = 0,071 \text{ km}^2$$

$$3,5 \text{ kg} = 3500 \text{ g}$$

$$0,9 \text{ g} = 900 \text{ mg}$$

$$324 \text{ kg} = 0,324 \text{ t}$$

$$29 \text{ kg} = 2900 \text{ dag}$$

2) Vypočítej

$$\begin{aligned} & (2 \cdot (-3) + 6 - (3 \cdot (-2) + 7)) - 2 \cdot (3 - 4) = \\ & = (-6 + 6 - (-6 + 7)) - 2 \cdot (-1) = \\ & = (0 - 1) + 2 = 1 \end{aligned}$$

$$\begin{aligned} (-20 + 6) : (-11 + 13) \cdot (-20) &= -14 : (2) \cdot (-20) = -7 \cdot (-20) = \\ &= \underline{\underline{140}} \end{aligned}$$

$$\begin{aligned} (-7 + 10) \cdot 2 - 16 \cdot (-8 + 7) &= 3 \cdot 2 - 16 \cdot (-1) = 6 + 16 = \underline{\underline{22}} \end{aligned}$$

3) Vypočítej

$$\frac{11}{6} - \frac{5}{9} = \frac{33 - 10}{18} = \frac{23}{18} = 1 \frac{5}{18}$$

$$\frac{5}{7} - \frac{1}{3} = \frac{15 - 7}{21} = \frac{8}{21}$$

$$\frac{6}{12} - \frac{3}{24} = \frac{12 - 3}{24} = \frac{9}{24} = \frac{3}{8}$$

$$\begin{aligned} \frac{8}{9} + \frac{8}{6} &= \frac{16 + 24}{18} = \frac{40}{18} = \\ &= \underline{\underline{\frac{20}{9}}} \end{aligned}$$

4) Vypočítej

$$\frac{12}{14} \cdot \frac{21}{18} = \underline{\underline{1}}$$

$$\frac{24}{11} \cdot \frac{33}{40} = \underline{\underline{\frac{9}{5}}}$$

$$\frac{12}{35} : \frac{9}{28} = \frac{12}{35} \cdot \frac{28}{9} = \underline{\underline{\frac{16}{15}}}$$

$$\frac{9}{20} : \frac{3}{2} = \frac{9}{20} \cdot \frac{2}{3} = \underline{\underline{\frac{3}{10}}}$$

$$\frac{34}{8} \cdot \frac{20}{17} = \underline{\underline{5}}$$

$$\frac{9}{7} \cdot \frac{5}{6} = \frac{15}{14} = \underline{\underline{1 \frac{1}{14}}}$$

$$\frac{32}{27} : \frac{16}{21} = \frac{32}{27} \cdot \frac{21}{16} = \underline{\underline{\frac{14}{9}}}$$

$$\frac{6}{25} : \frac{1}{30} = \frac{6}{25} \cdot \frac{30}{1} = \underline{\underline{\frac{36}{5}}}$$

5) Převeď na smíšená čísla a obrobenej:

$$4 \frac{2}{9} = \frac{38}{9}$$

$$3 \frac{1}{4} = \frac{13}{4}$$

$$5 \frac{2}{7} = \frac{37}{7}$$

$$\frac{11}{10} = \underline{\underline{1 \frac{1}{10}}}$$

$$\frac{34}{8} = 4 \frac{2}{8} = \underline{\underline{4 \frac{1}{4}}}$$

$$\frac{15}{4} = \underline{\underline{3 \frac{3}{4}}}$$

6) Řeš rovnice a proveď zkoušku

$$16 + 7x = 4x + 22$$

$$12 + 2y = 5y + 27$$

$$25 - (30 - 9x) = -(5 - 6x) - 15$$

$$-3 + 6y - (-6 - 2y) = -2 - (1 - 5y)$$

$$16 + 7x = 4x + 22$$

$$-4x$$

$$L = 16 + 7 \cdot 2 = 16 + 14 = \underline{\underline{30}}$$

$$16 + 3x = 22$$

$$-16$$

$$P = 4 \cdot 2 + 22 = 8 + 22 = \underline{\underline{30}}$$

$$3x = 6$$

$$:3$$

$$\underline{\underline{L = P}}$$

$$\underline{\underline{x = 2}}$$

$$\begin{aligned}
 12 + 2y &= 5y + 27 & | -2y \\
 2y &= 5y + 15 & | -5y \\
 -3y &= 15 & | :(-3) \\
 \underline{y} &= \underline{-5}
 \end{aligned}$$

$$\begin{aligned}
 L &= 12 + 2 \cdot (-5) = 12 - 10 = \\
 &= \underline{\underline{2}} \\
 P &= 5 \cdot (-5) + 27 = -25 + 27 = \\
 &= \underline{\underline{2}} \\
 L &= P
 \end{aligned}$$

$$\begin{aligned}
 25 - (30 - 9x) &= -(5 - 6x) - 15 \\
 25 - 30 + 9x &= -5 + 6x - 15 \\
 -5 + 9x &= -20 + 6x & | +5 \\
 9x &= -15 + 6x & | -6x \\
 3x &= -15 & | :3 \\
 \underline{x} &= \underline{-5}
 \end{aligned}$$

$$\begin{aligned}
 L &= 25 - (30 - 9 \cdot (-5)) = \\
 &= 25 - (30 + 45) = \\
 &= 25 - 75 = \underline{\underline{-50}} \\
 P &= -(5 - 6 \cdot (-5)) - 15 = \\
 &= -(5 + 30) - 15 = \\
 &= -35 - 15 = \underline{\underline{-50}} \\
 L &= P
 \end{aligned}$$

$$\begin{aligned}
 -3 + 6y - (-6 - 2y) &= -2 - (1 - 5y) \\
 -3 + 6y + 6 + 2y &= -2 - 1 + 5y \\
 3 + 8y &= -3 + 5y & | -3 \\
 8y &= -6 + 5y & | -5y \\
 3y &= -6 & | :3 \\
 \underline{y} &= \underline{-2}
 \end{aligned}$$

$$\begin{aligned}
 L &= -3 + 6 \cdot (-2) - (-6 - 2 \cdot (-2)) \\
 &= -3 - 12 - (-6 + 4) = \\
 &= -15 + 2 = \underline{\underline{-13}} \\
 P &= -2 - (1 - 5 \cdot (-2)) = \\
 &= -2 - (1 + 10) = -2 - 11 = \\
 &= \underline{\underline{-13}} \\
 L &= P
 \end{aligned}$$