

3. DÚ z MF pro 7. ročník

Termín odevzdání středa 26. 9. 2018

1. Řeš rovnice a proved' zkoušku: (na druhý papír)

$$7x + 9 = 6x - 10$$

$$9x - 7 = 6x + 14$$

$$6c + 30 = 5c - 4$$

$$40 - 45x = 90 - 35x$$

2. Vypočítej – opakování z loňska

$$a) 1\frac{1}{8} \cdot \left(-\frac{2}{3}\right) = \frac{9}{8} \cdot \left(-\frac{2}{3}\right) = -\frac{3}{4}$$

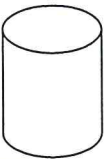
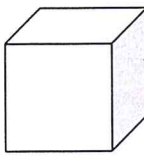
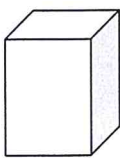

$$b) -6\frac{2}{5} : \left(-\frac{8}{15}\right) = -\frac{32}{5} \cdot \left(-\frac{15}{8}\right) = \underline{\underline{12}}$$

$$c) 2 - 1\frac{2}{3} - \frac{8}{9} = \frac{18}{9} - \frac{5}{3} - \frac{8}{9} = \frac{10}{9} - \frac{15}{9} = -\frac{5}{9}$$

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

3. Vypočítej povrch krychle o délce hrany 5, 3 cm.

4. Doplň tabulku – pomocí Tabulek pro ZŠ

TĚLESO	NÁZEV	POČET STĚN	TVAR PODSTAVY	VZOREC PRO VÝPOČET POVRCHU
	Válec	3	KRUH	x
	krychle	6	ČTVEREC	$S = 6 \cdot a$
	Kvádr	6	OBDELNIK	$S = 2 \cdot (ab + bc + ac)$
	čtyřboký hranol	6	čtverec	$S = 2 \cdot (aa + 4ac)$ nebo jako kvádr, kdy $b = a$

Rěšení 3. dí

$$\begin{array}{l} 1) \quad 7x + 9 = 6x - 10 \quad | -6x \\ \quad \quad x + 9 = -10 \quad | -9 \\ \quad \quad \quad \underline{x = -19} \end{array} \quad \begin{array}{l} L = 7 \cdot (-19) + 9 = \\ = -133 + 9 = \underline{\underline{-124}} \\ P = 6 \cdot (-19) - 10 = \\ = -114 - 10 = \underline{\underline{-124}} \\ \underline{L = P} \end{array}$$

$$\begin{array}{l} 9x - 7 = 6x + 14 \quad | -6x \\ 3x - 7 = 14 \quad | +7 \\ 3x = 21 \quad | :3 \\ \quad \quad \underline{x = 7} \end{array} \quad \begin{array}{l} L = 9 \cdot 7 - 7 = 63 - 7 = \underline{\underline{56}} \\ P = 6 \cdot 7 + 14 = 42 + 14 = \underline{\underline{56}} \\ \underline{L = P} \end{array}$$

$$\begin{array}{l} 6c + 30 = 5c - 4 \quad | -5c \\ c + 30 = -4 \quad | -30 \\ \quad \quad \underline{c = -34} \end{array} \quad \begin{array}{l} L = 6 \cdot (-34) + 30 = -204 + 30 = \underline{\underline{-174}} \\ P = 5 \cdot (-34) - 4 = -170 - 4 = \underline{\underline{-174}} \\ \underline{L = P} \end{array}$$

$$\begin{array}{l} 40 - 45x = 90 - 35x \quad | +35x \\ 40 - 10x = 90 \quad | -40 \\ -10x = 50 \quad | :(-10) \\ \quad \quad \underline{x = -5} \end{array} \quad \begin{array}{l} L = 40 - 45 \cdot (-5) = \\ = 40 + 225 = \underline{\underline{265}} \\ P = 90 - 35 \cdot (-5) = 90 + 175 = \\ = \underline{\underline{265}} \\ \underline{L = P} \end{array}$$