

Dragi učenici,

Prvo vam stavljam rješenja zadataka sa prošlog sata.

$$\textcircled{8.} \quad \text{f)} \quad 14 - x = 0 \\ -x = -14 \quad | :(-1) \\ \boxed{x = 14}$$

PROVJERA :

$$14 - 14 = 0 \\ 0 = 0 \quad \checkmark$$

$$\text{r)} \quad 0 = 3 + x \\ -x = 3 \quad | :(-1) \\ \boxed{x = -3}$$

PROVJERA :

$$0 = 3 + (-3) \\ 0 = 0 \quad \checkmark$$

$$\textcircled{9.} \quad \text{c)} \quad 5x = 12 \quad | :5 \\ \boxed{x = \frac{12}{5}}$$

PROVJERA :

$$5 \cdot \frac{12}{5} = 12 \\ 12 = 12 \quad \checkmark$$

$$\text{e)} \quad 2x = \frac{4}{3} \quad | :2 \quad \text{ili, lakše} \cdot \frac{1}{2}$$

$$x = \frac{4^2}{3} \cdot \frac{1}{2} \\ \boxed{x = \frac{2}{3}}$$

PROVJERA :

$$2 \cdot \frac{2}{3} = \frac{4}{3} \\ \frac{4}{3} = \frac{4}{3} \quad \checkmark$$

$$\text{g)} \quad 5x = \frac{1}{2} \quad | \cdot \frac{1}{5} \\ x = \frac{1}{2} \cdot \frac{1}{5} \\ \boxed{x = \frac{1}{10}}$$

PROVJERA

$$5 \cdot \frac{1}{10} = \frac{1}{2} \\ \frac{1}{2} = \frac{1}{2} \quad \checkmark$$

$$\textcircled{10.} \quad \text{b)} \quad \frac{3}{4}x = \frac{9}{2} \quad | \cdot 4 \\ 3x = 18 \quad | :3 \\ \boxed{x = 6}$$

PROVJERA

$$\frac{3}{4} \cdot 6 = \frac{9}{2} \\ \frac{9}{2} = \frac{9}{2} \quad \checkmark$$

$$\text{d)} \quad \frac{1}{2}x = -10 \quad | \cdot 2 \\ \boxed{x = -20}$$

PROVJERA

$$\frac{1}{2} \cdot (-20) = -10 \\ -10 = -10 \quad \checkmark$$

$$\textcircled{12.} \text{ e) } 13 + 7x = 6 - 7x$$

$$7x + 7x = 6 - 13$$

$$14x = -7 \quad | :14$$

$$x = -\frac{7^1}{14^2}$$

$$\boxed{x = -\frac{1}{2}}$$

PROVJERA:

$$13 + 7 \cdot \left(-\frac{1}{2}\right) \stackrel{?}{=} 6 - 7 \cdot \left(-\frac{1}{2}\right)$$

$$\frac{13}{1} - \frac{7}{2} \stackrel{?}{=} \frac{6}{1} + \frac{7}{2}$$

$$\frac{26 - 7}{2} = \frac{12 + 7}{2}$$

$$\frac{19}{2} = \frac{19}{2} \checkmark$$

$$\textcircled{14.} \text{ a) } 2 + (3x - 2) - 7 = 8x + 8$$

$$2 + 3x - 2 - 7 = 8x + 8$$

$$3x - 8x = 8 - 2 + 2 + 7$$

$$-5x = 15 \quad | :(-5)$$

$$\boxed{x = -3}$$

PROVJERA:

$$2 + (3 \cdot (-3) - 2) - 7 = 8 \cdot (-3) + 8$$

$$2 + (-9 - 2) - 7 = -24 + 8$$

$$2 - 11 - 7 = -16$$

$$2 - 18 = -16$$

$$-16 = -16 \checkmark$$

$$\text{b) } 4 - 4x = 4x + 4$$

$$-4x - 4x = 4 - 4$$

$$-8x = 0 \quad | :(-8)$$

$$\boxed{x = 0}$$

PROVJERA:

$$4 - 4 \cdot 0 = 4 \cdot 0 + 4$$

$$4 = 4 \checkmark$$

$$\text{f) } 4x - 3 - 2(5 - 3x) = 5x - (1 + 7x)$$

$$4x - 3 - 10 + 6x = 5x - 1 - 7x$$

$$4x + 6x - 5x + 7x = -1 + 3 + 10$$

$$12x = 12 \quad | :12$$

$$\boxed{x = 1}$$

PROVJERA:

$$4 \cdot 1 - 3 - 2(5 - 3 \cdot 1) = 5 \cdot 1 - (1 + 7 \cdot 1)$$

$$4 - 3 - 2 \cdot 2 = 5 - 8$$

$$4 - 3 - 4 = -3$$

$$-3 = -3 \checkmark$$

Sada kada ste provjerali sva rješenja, nastavljamo dalje s jednažbama!

Prouči i prepisi iduće primjere u bilježnicu:

1. Riješite jednadžbu:

$$\frac{2}{5}x - \frac{1}{2} = \frac{2}{3} \quad / \cdot 30$$

množimo obje strane jednakosti s najmanjim zajedničkim višekratnikom nazivnika $V(5, 2, 3) = 30$

$$30 \cdot \left(\frac{2}{5}x - \frac{1}{2} \right) = 30 \cdot \frac{2}{3}$$

distributivnost množenja

$$\cancel{30} \cdot \frac{2}{\cancel{5}}x - \cancel{30} \cdot \frac{1}{\cancel{2}} = \cancel{30} \cdot \frac{2}{\cancel{3}}$$
$$12x - 15 = 20$$
$$12x = 20 + 15$$
$$12x = 35 \quad / : 12$$
$$x = \frac{35}{12} = 2 \frac{11}{12}$$

2. Riješite jednadžbu:

$$\frac{5}{2} - \frac{x}{6} = -\frac{2}{3} \quad / \cdot 6$$

množimo obje strane jednakosti s najmanjim zajedničkim višekratnikom nazivnika $V(2, 6, 3) = 6$

$$\cancel{6} \cdot \frac{5}{\cancel{2}} - \cancel{6} \cdot \frac{x}{\cancel{6}} = \cancel{6} \cdot \left(-\frac{2}{\cancel{3}} \right)$$

svaki član jednadžbe množimo sa 6

$$15 - x = -4$$
$$-x = -4 - 15$$
$$-x = -19 \quad / : (-1)$$
$$x = 19$$

3. Riješite jednađbu:

$$\frac{x-5}{4} - \frac{2x+2}{8} = 3x \cdot 8$$

$$\cancel{8} \cdot \frac{x-5}{\cancel{4}} - \cancel{8} \cdot \frac{2x+2}{\cancel{8}} = 8 \cdot 3x$$

$$2(x-5) - 1(2x+2) = 24x$$

$$2x - 10 - 2x - 2 = 24x$$

$$2x - 2x - 24x = 2 + 10$$

$$-24x = 12 \quad | :(-24)$$
$$x = -\frac{\cancel{12}}{\cancel{24}} = -\frac{1}{2}$$

$$V(4, 8) = 8$$

svaki član jednađbe množimo s 8

Nakon što ste sve zapisali, pogledajte video u vremenu **od 26:32 do 35:49 minute** na poveznici <https://youtu.be/rHQbw3CccJQ?t=1592> **Zapišite** postupke rješavanja samo u **Zadatku 5!** Obratite pozornost na decimalne brojeve i što radimo s njima!

Domaća zadaća:

- 1) **Zadatak 18. a, b, c, d**, str. 135
- 2) **Zadatak 31. a, c**, str. 136

To bi bilo to za danas!

Ako trebaš pomoć, javi mi se na Teamsu.

Zadatke trebate riješiti do srijede u 12h!

Vaša,

Maja B.