

Линейные уравнения

▪ **Примеры** Решите уравнения:

№1

$$\frac{5}{7}x = 4\frac{2}{7}$$

№2

$$\frac{8}{9}x = 18\frac{2}{3}$$

№3

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

№4

$$\frac{3}{4}x = -19\frac{1}{2}$$

▪ **Решение (примеры)** Линейные уравнения

№1

$$\begin{aligned} \frac{5}{7}x &= 4\frac{2}{7} \\ \frac{5}{7}x &= \frac{30}{7} \quad \left| \cdot \frac{7}{5} \right. \\ \underline{x} &= \underline{6} \end{aligned}$$

№2

$$\begin{aligned} \frac{8}{9}x &= 18\frac{2}{3} \\ \frac{8}{9}x &= \frac{56}{3} \quad \left| \cdot \frac{9}{8} \right. \\ x &= 7 \cdot 3 \\ \underline{x} &= \underline{21} \end{aligned}$$

№3

$$\begin{aligned} -\frac{5}{8}x &= -3\frac{3}{4} \\ -\frac{5}{8}x &= -\frac{15}{4} \quad \left| \cdot \left(-\frac{8}{5}\right) \right. \\ x &= 3 \cdot 2 \\ \underline{x} &= \underline{6} \end{aligned}$$

№4

$$\begin{aligned} \frac{3}{4}x &= -19\frac{1}{2} \\ \frac{3}{4}x &= -\frac{39}{2} \quad \left| \cdot \frac{4}{3} \right. \\ x &= -13 \cdot 2 \\ \underline{x} &= \underline{-26} \end{aligned}$$

Вариант 1

Решите уравнения:

№1. $\frac{5}{9}x = 14\frac{4}{9}$

№2. $-\frac{4}{7}x = -6\frac{6}{7}$

№3. $-\frac{7}{8}x = -12\frac{1}{4}$

№4. $-\frac{8}{9}x = 21\frac{1}{3}$

Вариант 2

Решите уравнения:

№1. $\frac{7}{8}x = 21\frac{7}{8}$

№2. $-\frac{3}{5}x = -8\frac{2}{5}$

№3. $\frac{5}{6}x = 17\frac{1}{2}$

№4. $-\frac{5}{6}x = 18\frac{1}{3}$

▪ **Ответы (тест)** **Линейные уравнения**

	№1	№2	№3	№4
Вар.1	26	12	14	-24
Вар.2	25	14	21	-22

▪ **Решение (тест)** **Линейные уравнения**

Вариант 1

№1

$$\frac{5}{9}x = 14\frac{4}{9}$$

$$\frac{5}{9}x = \frac{130}{9} \quad \left| \cdot \frac{9}{5} \right.$$

$$\underline{x = 26}$$

№2

$$-\frac{4}{7}x = -6\frac{6}{7}$$

$$-\frac{4}{7}x = -\frac{48}{7} \quad \left| \cdot \left(-\frac{7}{4}\right) \right.$$

$$\underline{x = 12}$$

№3

$$-\frac{7}{8}x = -12\frac{1}{4}$$

$$-\frac{7}{8}x = -\frac{49}{4} \quad \left| \cdot \left(-\frac{8}{7}\right) \right.$$

$$x = 7 \cdot 2$$

$$\underline{x = 14}$$

№4

$$-\frac{8}{9}x = 21\frac{1}{3}$$

$$-\frac{8}{9}x = \frac{64}{3} \quad \left| \cdot \left(-\frac{9}{8}\right) \right.$$

$$x = -8 \cdot 3$$

$$\underline{x = -24}$$

Вариант 2

№1.

$$\frac{7}{8}x = 21\frac{7}{8}$$

$$\frac{7}{8}x = \frac{21 \cdot 8 + 7}{8} \quad \left| \cdot \frac{8}{7} \right.$$

$$x = \frac{7(3 \cdot 8 + 1)}{7}$$

$$\underline{x = 25}$$

№2.

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

$$-\frac{3}{5}x = -\frac{42}{5} \quad \left| \cdot \left(-\frac{5}{3}\right) \right.$$

$$\underline{x = 14}$$

№3.

$$\frac{5}{6}x = 17\frac{1}{2}$$

$$\frac{5}{6}x = \frac{35}{2} \quad \left| \cdot \frac{6}{5} \right.$$

$$x = \frac{35 \cdot 6}{2 \cdot 5}$$

$$x = 7 \cdot 3$$

$$\underline{x = 21}$$

№4.

$$-\frac{5}{6}x = 18\frac{1}{3}$$

$$-\frac{5}{6}x = \frac{55}{3} \quad \left| \cdot \left(-\frac{6}{5}\right) \right.$$

$$x = -\frac{55 \cdot 6}{3 \cdot 5}$$

$$x = -11 \cdot 2$$

$$\underline{x = -22}$$