

- Fisa de lucru 1 -



1. Aduceti la acelasi numitor fractiile: $\frac{7}{5}$; $\frac{8}{10}$; $\frac{3}{2}$; $\frac{3}{5}$; $\frac{1}{2}$ si $\frac{11}{10}$.
2. Aduceti la acelasi numitor comun urmatoarele fractii: $\frac{1}{9}$ si $\frac{4}{15}$; $\frac{1}{10}$ si $\frac{2}{25}$; $\frac{1}{8}$ si $\frac{7}{10}$;
 $\frac{5}{12}$ si $\frac{21}{15}$; $\frac{3}{16}$ si $\frac{7}{6}$.
3. Comparati fractiile: $\frac{2}{7}$ si $\frac{3}{7}$; $\frac{2}{5}$ si $\frac{2}{7}$; $\frac{1}{2}$ si $\frac{3}{5}$; $\frac{5}{7}$ si $\frac{3}{8}$; $\frac{5}{7}$ si $\frac{2}{3}$; $\frac{2}{7}$ si $\frac{3}{4}$; $\frac{1}{25}$ si $\frac{3}{4}$; $\frac{5}{11}$ si $\frac{2}{33}$.



1. Ordonati descrescator urmatoarele fractii: $\frac{1}{2^2}$, $\frac{1}{3^2}$ si $\frac{1}{2 \cdot 3}$; $\frac{1}{3^2}$, $\frac{1}{4^2}$ si $\frac{1}{3 \cdot 4}$;
 $\frac{1}{2017^2}$, $\frac{1}{2018^2}$ si $\frac{1}{2017 \cdot 2018}$.
2. Scrieti toate fractiile subunitare de forma $\frac{3x+1}{14}$, unde $x \in \mathbb{N}$.
3. Aduceti la acelasi numitor comun urmatoarele fractii: $\frac{4}{15}$, $\frac{3}{5}$ si $\frac{8}{9}$; $\frac{2}{7}$, $\frac{5}{4}$ si $\frac{3}{14}$;
 $\frac{2}{9}$, $\frac{5}{18}$ si $\frac{7}{4}$; $\frac{7}{12}$, $\frac{3}{10}$ si $\frac{4}{15}$; $\frac{8}{9}$, $\frac{4}{21}$ si $\frac{5}{7}$; $\frac{5}{18}$, $\frac{7}{6}$ si $\frac{4}{27}$; $\frac{2}{9}$, $\frac{5}{24}$ si $\frac{7}{18}$; $\frac{3}{20}$, $\frac{4}{5}$ si $\frac{9}{16}$.



1. Sa se compare urmatoarele fractii, aducandu-le la acelasi numitor comun:
 $\frac{5}{13}$ si $\frac{7}{26}$; $\frac{5}{48}$ si $\frac{1}{32}$; $\frac{7}{36}$ si $\frac{1}{27}$; $\frac{8}{75}$ si $\frac{3}{10}$; $\frac{7}{24}$ si $\frac{1}{16}$.
2. Scrieti fractiile urmatoare sub forma ireductibila, apoi aduceti fractiile obtinute la acelasi numitor comun: $\frac{6}{12}$ si $\frac{14}{21}$; $\frac{5}{20}$ si $\frac{22}{55}$; $\frac{9}{27}$ si $\frac{9}{36}$; $\frac{48}{60}$ si $\frac{32}{56}$; $\frac{6}{9}$ si $\frac{20}{24}$;
 $\frac{6}{16}$ si $\frac{25}{30}$.
3. Stabiliti valoarea de adevar a propozitiilor: $\frac{1+2+3+\dots+60}{2+4+6+\dots+120} < \frac{3}{9}$;
 $\frac{3+6+9+\dots+150}{5+10+15+\dots+250} > \frac{22}{35}$; $\frac{3^{50}+81^{12}}{9^{25}-27^{16}} < \frac{19}{16}$; $\frac{2^{43}+4^{21}}{64^7+16^{11}} > \frac{29}{50}$; $\frac{5^{97}-125^{32}}{5^{98}-25^{48}} = \frac{12}{72}$.

- Fisa de lucru 2-



1. Efectuati: $\left(\frac{40}{59} + \frac{15}{59}\right) - \left(\frac{7}{59} + \frac{10}{59}\right)$; $\frac{2}{73} + \frac{32}{73} - \left(\frac{65}{73} - \frac{49}{73}\right)$;
 $\frac{45}{91} - \left[\frac{33}{91} - \left(\frac{88}{91} - \frac{69}{91}\right) + \frac{1}{91}\right]$.
2. In luna iunie, de pe o suprafata de teren s-au recoltat $72\frac{5}{6}$ kg de rosii, iar in luna urmatoare s-au recoltat cu $34\frac{2}{9}$ kg mai mult decat in luna precedent. Aflati ce cantitate de rosii s-au recoltat in lunile iunie si iulie la un loc.
3. Calculati si exprimati rezultatul printr-o fractie ireductibila: $\frac{1}{9} + \frac{3}{7}$; $\frac{7}{20} - \frac{5}{18}$;
 $\frac{8}{13} - \frac{5}{39}$; $3 - \frac{2}{5}$; $\frac{3}{6} + \frac{4}{3} + \frac{7}{12}$; $5\frac{1}{4} + 6\frac{1}{10}$; $6\frac{1}{4} + 5\frac{2}{3} + 1\frac{17}{24}$.



1. Calculati, simplificand mai intai fractiile (unde este posibil): $\frac{20}{3} - \frac{21}{9}$; $\frac{41}{6} - \frac{35}{30}$;
 $\frac{41}{18} - \frac{7}{18} - \frac{39}{54}$; $1\frac{1}{26} - \frac{11}{26} - \frac{9}{78}$; $1\frac{7}{30} - \frac{19}{30} - \frac{16}{60}$.
2. Aflati numarul mai mare cu: $2\frac{3}{5}$ decat $6\frac{8}{5}$; $4\frac{4}{7}$ decat $2\frac{5}{7}$; $2\frac{3}{10}$ decat $5\frac{1}{4}$; $5\frac{3}{8}$ decat $7\frac{5}{12}$; $4\frac{11}{14}$ decat $9\frac{3}{4}$.
3. Rezolvati ecuatiile: $x + \frac{1}{4} = \frac{4}{5}$; $x - 1\frac{1}{8} = \frac{3}{4}$; $\frac{7}{3} - x = \frac{1}{4}$; $x + \frac{17}{4} = 5$; $x - 2\frac{1}{5} = 4\frac{1}{3} - 1\frac{1}{2}$; $x + \frac{1}{15} = 2\frac{1}{3} + \frac{1}{5}$.



1. Calculati: $\frac{a}{19} + \frac{11a}{19} + \frac{7a}{19}$; $\frac{29c}{47} - \frac{21c}{47} - \frac{8c}{47}$; $\frac{11x}{14} + \frac{2x+3}{14} + \frac{x+5}{14}$; $\frac{5x+8}{6} - \frac{3+4x}{6}$;
 $\frac{7x+5}{8} - \frac{2x-8}{8} + \frac{4x-3}{8}$; $\frac{10b+14}{15} - \frac{8b-5}{15} - \frac{b+6}{15}$.
2. Calculati: $\frac{1}{19} + \frac{2}{19} + \frac{3}{19} + \dots + \frac{75}{19}$; $\frac{3}{23} + \frac{6}{23} + \frac{9}{23} + \dots + \frac{411}{23}$; $\frac{5}{27} + \frac{10}{27} + \frac{15}{27} + \dots + \frac{400}{27}$;
 $\frac{11}{47} + \frac{17}{47} + \frac{23}{47} + \dots + \frac{365}{47}$.
3. Aratati ca a si b sunt numere naturale:
 $a = 1\frac{1}{47} + 2\frac{2}{47} + 3\frac{3}{47} + \dots + 46\frac{46}{47}$ si $b = 1\frac{1}{53} + 2\frac{2}{53} + 3\frac{3}{53} + \dots + 52\frac{52}{53}$.