OPAKOVANIE – Výrazy a rovnice

Výrazy a rovnice v súčinovom a podielovom tvare

1. Upravte výrazy:

   a) $(3m - 4).(3m + 4)$

   b) $(a - 2).(a + 1)$

   c) $(2x - 5y).(x + 3y)$

   d) $(3a + 1)^2$

   e) $(5n - 2m)^2$

   f) $(1 + 4p)^2$

   g) $(2a - b).(-b + 2a)$

   h) $(-r + 7s).(-2r - s)$

2. Upravte:

   a. $\dfrac{3x+1}{2} + \dfrac{5-9x}{8} + \dfrac{x-7}{4}$

   b. $\dfrac{2a+3b}{2} - \dfrac{a-2b}{3} + \dfrac{a-b}{4}$

   c. $\dfrac{n-1}{2} + \dfrac{3n-1}{4} - \dfrac{5n-1}{6}$

   d. $\dfrac{2(r-s)}{3} \dfrac{3(r-1)}{5} + \dfrac{s+1}{2}$

   e. $\dfrac{5(2x-y)}{8} - \dfrac{3(x-4y)}{2} + \dfrac{7(x-y)}{6}$

   f. $\dfrac{x+1}{a-b} + \dfrac{x-1}{a-b}$

   g. $\dfrac{a}{x+y} + \dfrac{a-3}{x+y}$

   h. $\dfrac{m-4}{n+2} + \dfrac{m-3}{2+n}$

   i. $\dfrac{3a+1}{5v+z} - \dfrac{2a+3}{5v+z}$

3. Riešte rovnice:

   a. $2(y - 1) - 3(y - 2) + (y - 3) = 2(y + 5)$

   b. $x - 4(x - 11) - 5(x - 16) = 4(x - 5)$

   c. $10u + 2(7u - 2) = 5(4u + 3) + 3u$

   d. $8(3z - 2) - 1 - 13z = 5(12 - 3z) + 7z$

   e. $\dfrac{x-2}{3} = \dfrac{x+4}{5}$

   f. $\dfrac{c-1}{3} + \dfrac{c+2}{2} = 9$

   g. $\dfrac{2z}{9} - \dfrac{3z}{3} + \dfrac{5z}{6} = 8 - \dfrac{8z}{27}$

   h. $\dfrac{x}{2} + \dfrac{x}{3} - \dfrac{3x}{4} + \dfrac{x}{6} = \dfrac{7x}{12} - \dfrac{4x}{15} - 4$