

Rješenja domaćeg rada (faktorizacija i algebarski razlomci)

- 1.a) $5ab(2a - 5)(2a + 5)$
 b) $4b(2x + y)$
 c) $-3a^3(1 + 2a)^2$
 d) $(a - 3)(7a - 21 + 1) = (a - 3)(7a - 20)$
 e) $(3 + y)(2x - y)$
 f) $(3a - 2b^2)(2a^2b + 3)$
 g) $((5a - 1) - 2)((5a - 1) + 2) = (5a - 3)(5a + 1)$

- 2.a) $\frac{30b}{7a^4}$
 b) $\frac{5e^2f}{4a}$
 c) $\frac{(b-3)^2}{(b-6)(b+6)} \cdot \frac{-2(b-6)}{-(b-3)} = \frac{2(b-3)}{b+6}$
 d) $\frac{3b^2}{2}$
 e) $\frac{x^3-1-y^3}{x^2y^2}$
 f) $\frac{a-b}{a^2b^2}$
 g) 1
 h) $\left(\frac{3n(m-3n)+(m+3n)^2}{mn(m+3n)(m-3n)} \right) \cdot \frac{-n(m-3n)(m+3n)}{(m+9n)^2}$

$$= \frac{m(m+9n)}{m} \cdot \frac{-1}{(m+9n)^2}$$

$$= -\frac{1}{(m+9n)}$$

 i) $-\frac{1}{x-2}$
 j) $\frac{x}{1-y} + \frac{x(x-1)}{(y-1)(y+1)} \cdot \frac{(1+y)}{x} = \frac{x}{1-y} + \frac{x-1}{y-1} = \frac{x}{1-y} + \frac{x-1}{-(1-y)} = \frac{x}{1-y} - \frac{x-1}{1-y} = \frac{1}{1-y}$