Herhalingsoefeningen breuken, haakjes, machten

Oefening 1. Vul aan. Je mag veronderstellen dat een uitdrukking die in de noemer staat steeds verschilt van 0.

1. $\frac{4x^2}{5} - 3x = 4x \cdot [\dots\dots]$

2. $(p+1)^2 + \frac{(p+1)^3}{2} + \frac{(p+1)^2}{6} = \frac{(p+1)^2}{2} \cdot [\dots\dots]$

3. $\frac{(m+n)}{2} \cdot \frac{m^2}{(m+n)^2} - \frac{m}{2} = \frac{\dots\dots}{2(m+n)}$

4. $\sqrt{2} + \sqrt{8} + \sqrt{18} + \sqrt{50} = \dots\dots \cdot \sqrt{2}$

5. $\frac{4}{q} - \frac{8+q}{2q^2} = \frac{\dots\dots}{2q^2}$

6. $\frac{-8}{2x} + \frac{4}{x-1} + \frac{3}{(x-1)^2} = \frac{\dots\dots}{2x(x-1)^2}$

7. $\left(a^{-1} \cdot b^{-3} \cdot c^2\right)^3 \cdot \left(a^{-2} \cdot b^{-4} \cdot c^3\right)^{-2} = a^{\dots\dots} \cdot b^{\dots\dots} \cdot c^{\dots\dots}$

8. $\left(\frac{1}{x} + \frac{1}{y^2}\right)^{-1} = \frac{\dots\dots}{x+y^2}$

9. $(a+b)^3 - \left(a^3 + b^3\right) = (a+b) \cdot \dots\dots$

10. $\frac{a+b}{a^2+b^2} - \frac{a-b}{a^2-b^2} = \frac{\dots\dots}{a^4-b^4}$

11. $(t-1) \cdot (1+t+t^2) = \dots\dots$

12. $\frac{\frac{1}{2p} - \frac{1}{2}}{2p-2} = \dots\dots \cdot \frac{1}{p}$

13. $\frac{1}{2 + \frac{1}{2+1}} = \dots\dots$

14. $n^{-1} + n^{-2} + n^{-3} = n^{-3} \cdot (\dots\dots) = \frac{\dots\dots}{n^3}$

15. $x + 1 + \frac{1}{x-1} = \frac{\dots\dots}{x-1}$

16. $xy^2z^3 + \frac{x^2yz}{2} + \frac{xyz^2w}{3} = xyz \cdot [\dots\dots]$

17. $\frac{3}{q} + \frac{1}{2q} - \frac{2}{4q} = \frac{\dots\dots}{4q} = \frac{\dots\dots}{q}$

18. $\left(\frac{n^4}{m^3} \cdot \frac{m^{-5}}{n^3}\right)^2 = \frac{n^{\dots\dots}}{m^{\dots\dots}}$

19. $\frac{1}{b+c} - \frac{1}{c} = \frac{\dots\dots}{c(b+c)}$

20. $\frac{x^2z}{2} + zyx + \frac{zy^2}{2} = \frac{x+y}{2} \cdot [\dots\dots]$

21. $\left(\frac{-4}{a}\right)^2 + \frac{3}{2a} = \frac{3}{a^2} \cdot [\dots\dots]$

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22. $a^x \cdot a^{-\frac{2x}{3}} = a^{\cdots\cdots x}$

23. $(k+l+m)^2 = ((k+l)+m)^2 = k^2 + 2kl + l^2 + \ldots\ldots$

24. $\left(-(-x+y)\cdot(-1)^{-3}\right)^2 =$ $\boxed{+(y-x)^2}$ $\boxed{-(y-x)^2}$

25. $\frac{2}{a}\cdot\frac{1}{a}\cdot 3a - \frac{1}{a+1}\cdot\frac{1}{a} = \frac{\ldots\ldots}{a(a+1)}$

26. $\dfrac{-1}{1-\dfrac{x+1}{x}} = \ldots\ldots$

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