18.1.2021.

~ Алгебарски изрази ~

513. б) $B = 2b^2 + 5b + 10 \quad b = -3$

$B = 2 \cdot (-3)^2 + 5 \cdot (-3) + 10$

$B = 2 \cdot 9 + (-15) + 10$

$B = 18 - 5$

$B = 13$

г) $y = (x+y)^2 - 3xy \quad x = 5 \quad y = 2$

$y = (5+2)^2 - 3 \cdot 5 \cdot 2$

$15 \cdot 2$

$y = 49 - 30$

$y = 19$

432. а) $\frac{5^2 \cdot 5^5}{5^4} : \frac{5^7}{5^4} = 5^3 = 5 \cdot 5 \cdot 5 = 125$

д) $\frac{5^5 \cdot 5^6 \cdot 5^3}{5^{15} : 5^3} = \frac{5^{14}}{5^{12}} = 5^2 = 25$

456. б) $\frac{2^9 : 8^2}{2^3} = \frac{2^9 : (2^3)^2}{2^3} = \frac{2^9 : 2^6}{2^3} = \frac{2^3}{2^3} = 1$

469. а) $0{,}02^3 \cdot 25^3 = (0{,}02 \cdot 25)^3 = \left(\frac{2}{100_4} \cdot \frac{25^1}{1}\right)^3 = \left(\frac{2}{4}\right)^3 = \left(\frac{1}{2}\right)^3 = \frac{1}{2^3} = \frac{1}{8}$

461)

б) $$\frac{x^2 \cdot (x^2)^3 : x^5}{x^{11} : x^9} = \frac{x^2 \cdot x^{2\cdot 3} : x^5}{x^{11-9}} = \frac{x^2 \cdot x^6 : x^5}{x^2} = \frac{x^{2+6} : x^5}{x^2}$$

$$= \frac{x^8 : x^5}{x^2} = \frac{x^{8-5}}{x^2} = \frac{x^3}{x^2} = x^{3-2} = x^1 = x$$

469)

и) $$\left(\frac{2}{7}\right)^{35} \cdot \left(3\frac{1}{2}\right)^{35} = \left(\frac{2}{7}\right)^{35} \cdot \left(\frac{7}{2}\right)^{35} = \left(\frac{2}{7} \cdot \frac{7}{2}\right)^{35} = 1^{35} = 1$$

$$3\frac{1}{2} = \frac{3 \cdot 2}{2} + \frac{1}{2} = \frac{7}{2}$$