**Priprema za drugi pismeni ispit (Algebra)**

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| 1. Izvrši zadane radnje.
	1. Razliku izraza $2a+3b$ i $b-a$ umanji za njihov zbroj.
	2. Pomnoži izraze $x^{2}-5x+1$ i $3-2x$.
	3. Izračunaj četvrtinu izraza $12x^{3}-16x^{2}+20x-32$.
	4. Kvadriraj izraz $4c-5d$.
	5. Kubiraj izraz $c+3d$.
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| 1. Izračunaj i pojednostavni razultate.
	1. $\left(4x^{3}+\frac{1}{4}y^{4}\right)^{2}$
	2. $\left(-8a+6b\right)^{2}$
	3. $\left(-xy-z^{4}\right)^{2}$
	4. $\left(0.25a-\frac{1}{7}b\right)\left(0.25a+\frac{1}{7}b\right)$
	5. $\left(1-x\right)\left(1+x^{2}\right)\left(1+x\right)$
	6. $\left(x-y-z\right)\left(x+y+z\right)$
	7. $\left(4+2x\right)^{3}$
	8. $\left(1-3x\right)\left(1+3x+9x^{2}\right)$
	9. $\left(2a+b\right)^{2}-\left(2a-b\right)^{2}$
	10. $x^{2}-\left(x+7\right)\left(x-7\right)$
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| 1. Dopuni izraze tako da navedene jednakosti budu istinite.
	1. $m^{2}+12m+\\_\\_\\_\\_=\left(\\_\\_\\_\\_+\\_\\_\\_\\_\right)^{2}$
	2. $\\_\\_\\_\\_-0.4ab+\\_\\_\\_\\_=\left(\\_\\_\\_\\_-2b\right)^{2}$
	3. $t^{2}+\\_\\_\\_\\_+\frac{1}{49}=\left(    \right)^{2}$
	4. $\\_\\_\\_\\_-24xy^{2}z+y^{4}=\left(    \right)^{2}$
	5. $\left(x-\\_\\_\\_\\_\right)\left(x+\\_\\_\\_\\_\right)=\\_\\_\\_\\_-49$
	6. $\left(\\_\\_\\_\\_+9a^{4}\right)\left(\\_\\_\\_\\_-9a^{4}\right)=64b^{6}-\\_\\_\\_\\_$
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| 1. Rastavi na faktore sljedeće izraze.
	1. $a\left(x+z\right)+b\left(x+z\right)-c^{2}\left(x+z\right)$
	2. $15a^{3}b^{2}c+45a^{4}b^{5}c^{3}+75a^{6}b^{3}c^{2}$
	3. $6x+9+2ax+3a$
	4. $x^{3}+2x^{2}+x+2$
	5. $x^{2}-9x+20$
	6. $a^{2}+a-6$
	7. $100-20a^{2}+a^{4}$
	8. $\frac{6}{5}x+\frac{9}{25}+x^{2}$
	9. $28c^{2}-28c+7$
	10. $-3a^{3}-12a^{4}-12a^{5}$
	11. $81-25y^{2}$
	12. $-a^{2}+0.01$
	13. $4x^{3}-36x$
	14. $\left(3x-4y\right)^{2}-25$
	15. $\left(x^{2}+y^{2}\right)^{2}-4x^{2}y^{2}$
	16. $8x^{3}-12x^{2}y+6xy^{2}-y^{3}$
	17. $a^{3}b^{3}+15a^{2}b^{2}+75ab+125$
	18. $x^{3}+1$
	19. $27a^{3}-8b^{3}$
	20. $2+16y^{3}$
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| 1. Skrati razlomke.
	1. $\frac{5x-2y}{4y^{2}-25a^{2}}$
	2. $\frac{2a^{4}-8a^{3}b+8a^{2}b^{2}}{a^{4}-2a^{3}b}$
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| 1. Izvrši navedene operacije.
	1. $\frac{5}{20x^{2}}-\frac{2}{xy}+\frac{3}{8y^{2}}-1$
	2. $\frac{x-5}{3x^{2}-6x}-\frac{3}{2x+4}+\frac{1-2x}{4-x^{2}}$
	3. $\frac{14xy^{2}}{21x^{2}}⋅12xy$
	4. $\frac{x^{2}-4x}{3x}⋅\frac{1}{4-x}$
	5. $\frac{28a^{2}bc^{4}}{5x^{2}y^{3}z^{2}}:\frac{35a^{2}b^{2}c}{30xy^{2}z^{3}}$
	6. $\frac{x^{2}+4x+4}{x^{2}-25}:\frac{x+2}{x-5}$
	7. $\left(a-\frac{a}{2-a}\right)⋅\frac{a^{2}-4a+4}{a^{2}-1}$
	8. $\frac{2x}{x+\frac{1}{x}+\frac{1-x^{2}}{x}}$
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