

PREVERJANJE ZNANJA 1. TEST

Naravna in cela števila

1. Izračunaj:

(a) $(8 - 3 \cdot 5)(3 \cdot (4 - 7) + 7) + 19 =$

(b) $(5 - 8) \cdot 4 + 5 \cdot (78 - 7 \cdot (5 + 3)) - (-12 + 17) \cdot 3 - 23 =$

2. Reši enačbe in neenačbe:

(a) $4x + 5 = 3x - 1,$

(b) $3 \cdot (2x - 1) - 2 \cdot (x - 5) = 4 \cdot (x + 1) + 3,$

(c) $-x + 4 > 9,$

(d) $4x - 6 \leq 5x + 8,$

(e) $2x - 5 < 2x - 7.$

3. Poenostavi:

(a) $c^8(-d)^9c^{11}(-d)^{21} =$

(b) $(-u)^3(-v)^7u^{13}v^4 =$

(c) $(-a^3b^5)^2(2a^4b)^5 =$

(d) $(-a^6b^4)^3(4a^3b^5)^2 =$

(e) $(2a + 7)^2 - (a - 1)(a + 4) =$

(f) $2x(x - 3) - (x + 1)(x + 7) =$

(g) $(2a - 3)^2 - (3a + 2)^2 =$

4. Zmnoži in poenostavi:

(a) $(4s - 3)(3s - 1) =$

(b) $(6t - 7)(2t - 5) =$

(c) $(2a + 1)(a^2 - 5a + 3) =$

(d) $(a^2 + 2a + 5)(a - 4) =$

5. Kvadriraj:

(a) $(c - 6d)^2 =$

(b) $(3a + 2b)^2 =$

(c) $(5c + 3d)^2 =$

(d) $(a - 2b)^2 =$

(e) $(-c + 13d)^2 =$

(f) $(-4a + 6b)^2 =$

6. Kubiraj:

(a) $(3 + y)^3 =$

(b) $(3 - b)^3 =$

(c) $(4c - 1)^3 =$

7. Izpostavi skupni faktor:

(a) $5a^3 + 10a^2 =$

(b) $4x^3 + 12x^2 =$

8. Razstavi:

(a) $4a^2 - 9 =$

(b) $1 - 9y^2 =$

(c) $y^2 - 36b^2 =$

9. Izračunaj na čim krajši način:

(a) $(x - 5)(x + 5) =$

(b) $(2 + b)(2 - b) =$

(c) $(7c^8 - 2d^3)(7c^8 + 2d^3) =$