

VI ASTENDAMINE

1. Arvutage astme väärtus, kui:

1) astme alus -2 on ja astendaja on 3;

2) astme alus on -1 ja astendaja on 16.

2. Kirjutage arvu -3 astmena.

$$81 = \dots\dots\dots \quad 9 = \dots\dots\dots \quad -27 = \dots\dots\dots$$

3. Arvutage.

$$3 + 2^3 \cdot 2^2 + 5 \cdot 5^3 =$$

$$(-1)^5 \cdot (-1)^4 + (-1)^6 =$$

4. Leidke antud astmete jagatis.

$$\frac{a^7}{a^3} = \quad \frac{b^{15}}{b^7} =$$

5. Arvutage.

$$(-2 \cdot 4)^2 =$$

$$(4 : a)^8 =$$

$$(a : c)^3 =$$

$$(-t : 4s)^3 =$$

$$(-0,4 \cdot 5)^3 =$$

$$(0,1 \cdot 1\,000)^4 =$$

6. Arvutage.

$$(b^2)^6 = \dots\dots\dots$$

7. Täitke tabel.

a	a^3	a^2	a^1	a^0	a^{-1}	a^2	a^{-3}
-5							

8. Arvutage.

$$\left(\frac{3}{4}\right)^2 =$$

$$\left(\frac{-1}{2}\right)^{-1} =$$

$$(-2,5 \cdot 4)^{-3} =$$

$$(-1 \cdot 8)^{-1} =$$

$$(4 : 16)^2 =$$

$$(21 \cdot 783)^0 =$$

$$(4j^3)^2 =$$

$$7^4 : 7 =$$

$$17^6 : 17^6 =$$

$$3 \cdot 3^3 =$$

VALEMID!

$$a^n \cdot a^m = a^{n+m}$$

$$(a \cdot b)^n = a^n \cdot b^n$$

$$(a^m)^n = a^{mn}$$

$$(a : b)^n = a^n : b^n$$

$$a^m : a^n = a^{m-n}$$

$$a^0 = 1 \quad \text{ja} \quad a^{-n} = \frac{1}{a^n}.$$

