

基本功专练(七) 幂的计算

计算:

(1) $5^2 \times 5^3 \times 5^5$;

(2) $(-a)^4 \cdot a^3$;

(3) $x^{3n} \cdot x^{2n-2}$;

(4) $x^5 \cdot (-x) - x^3 \cdot (-x)^3$;

(5) $(m-3n)(m-3n)^3(3n-m)^2$;

(6) $(10^5)^2$;

(7) $(-x^7)^3 \cdot x^5$;

(8) $(y^4)^2 + (y^2)^3 \cdot y^2$;

(9) $2^2 \times 4^2 \times 8^2$;

(10) $(2ab)^3$;

(11) $(-3 \times 10^2)^4$;

(12) $[(a^2)^3 + (2a^3)^2]^2$.

基本功专练(八) 整式的乘除法

计算:

$$(1) 5x^2y \cdot (-3x^2yz);$$

$$(2) \left(-\frac{1}{2}a^2b^3\right)^3 \cdot (-2a^2b)^2;$$

$$(3) (5mn^2 - 4m^2n)(-2mn);$$

$$(4) (-6a)\left(-\frac{1}{2}a^2 - \frac{1}{3}a + 2\right);$$

$$(5) (x^2 + 2x - 1) \cdot (-3x^2)^2;$$

$$(6) (2a - 3b)(3a + 2b);$$

$$(7) \frac{1}{2}(2x - y)(x + y);$$

$$(8) (-7x^2 - 8y^2)(-x^2 + 3y^2);$$

$$(9) (-m^3)^2 \div m^4;$$

$$(10) (x - y)^8 \div (y - x)^5;$$

$$(11) (1.5 \times 10^9) \div (-5 \times 10^6);$$

$$(12) (12a^2 - 6a) \div (-2a).$$