

初一数学暑假班基础教案参考答案

第一讲:

练习 1: (1) $3a+2$ (2) $-\frac{4}{3}b$ (3) $9-\frac{1}{3}y$ (4) $(a+b)(a-b)$ (5) x^2-y^2

(6) $(x-y)^2$ (7) $2a-b^2$ (8) $a-2b^2$ (9) $180(1+x\%)$

练习 2: (1) $\frac{xy}{x+y}$ (2) $3x+y^3$ (3) $\frac{3}{2}(x+y)$ (4) $(x-y)^2$ (5) x^3+y^3

(6) $(x+y)^3$

练习 3: (1) $3200x+2000$ (2) $1.25a, 1.125a, 0.125a$

第二讲:

巩固练习:

1. $-\frac{3}{8}$, 2 2. 2, 3, -3, -5 3. $4x^4+4x^2-5x-3$ 4. $-3+ab+a^2b^2-5a^3b^3$

5. 4, 3 6. 3 7. 8 8. 8, 4, -3 10. -32 11. $6\frac{1}{4}$ 12. -17

第三讲:

巩固练习:

1. (2)、(3)、(6) 不是 2. C 3. B 4. C 5. $-5x^2, -7x^2; 1$

6. (1) $-a^2+7a$ (2) $-2c+4a$ 7. (1) $-7a^3+3a^2+5a-3, 55$

(2) $-x^2y+xy^2, -6$

第四讲:

巩固练习:

1. (1) 10^6 (2) 10^8 (3) b^{3m} (4) b^{2+m} (5) $-a^9$ (6) $-a^6$

2. 只有 (2) 正确

3. (1) - (2) + (3) - (4) + (5) - (6) +

4. (1) 8^7 (2) 10^7 (3) $(\frac{3}{7})^8$ (4) $-x^7$ (5) $(x+y)^8$ (6) a^9

(7) $2a^7$ (8) $10a+a^{10}$ (9) $2x^6$ (10) 0

5. (1) 2^{17} (2) 2 (3) 2 或 -2 (4) a^2 (5) mn, m^2n^2

第五讲:

巩固练习

1. (1) $9a^2$ (2) a^6b^3 (3) $\frac{1}{8}a^3b^6$ (4) $-8a^6b^6$

2. 全错 3. (1) ab^2 (2) $6a^3b^5$ (3) $2 \times 5, 10$ (4) $4 \times 25, 100, 6$

4. (1) 1000 (2) 10^6 (3) 0.25 (4) 100^6

复习:

1. (1) 16 (2) $-x^5$ (3) n^{10} (4) $-t^9$ (5) $(a-b)^7$ (6) $(2x+y)^{13}$

2. (1) -2^{12} (2) a^6 (3) $(x+y)^8$ (4) $-(x+y)^{12}$ (5) x^{3n} (6) x^{n+3}

(7) $-x^9$ (8) 0

3. (1) $7x^6$ (2) $\frac{26}{27}x^6$ (3) 2 (4) $-\frac{3}{2}$ (5) 3×10^{11} (6) 675

(7) 56

第六讲:

巩固练习: 1. D 2. A 3. C

4. (1) $2a^2 - 6a$ (2) $(x+y)^{18}$ (3) $-\frac{18}{7}x^4y^5$ (4) $-7a^3b^3$

5. $x^8, 256$ 6. $5^{333} < 3^{555} < 4^{444}$

第七讲:

巩固练习: 1. (1) $\frac{2}{3}a^2b$ (2) $-10x^3y$ (3) $\frac{5}{4}a^2b^3$ (4) $-10x^5y^2$

2. (1) $\times, 8a^6$ (2) $\times, 30a^5$ (3) $\times, 21a^4$ (4) $\times, 12a^5b$

3. (1) $-12a^3b^2$ (2) $-8x^5y^4$ (3) 0 4. B

5. (1) $6a^2h, 6a^2 + 5ah$ (2) 12, 29

6. (1) $10x^4$ (2) $-x^4$ (3) $-6x^3$ (4) $ax - ay$ (5) $x^2 - x^3 - x^4$

(6) $2a^3b + 4a^2b^2 + 6ab^3$

7. (1) -6×10^7 (2) $12a^6b^3$

第八讲:

巩固练习

1. $x - \frac{1}{4}a$ 2. $2(x+3x)$, 32 3. $a^2 - \frac{\pi}{4}a^2$ 4. A 5. C 6. C

7. (1) $16a^5 - 8a^3 + 4a^2$ (2) $x^3 - y^3$ (3) $16 - y^4$ (4) $a^2 - 2ab - b^2$

9. -24 10. 2

第九讲:

巩固练习

1. D 2. (1) $4x^2 - 25$ (2) $1 - 4a^2$ (3) $\frac{1}{9}a^2 - \frac{1}{4}b^2$ (4) $4x^2 - 9y^2$

(5) $9b^2 - 4a^2$ (6) $\frac{1}{81}y^4 - x^4$ (7) $a^2 - 4b^2 + 4bc - c^2$ (8) $-x^4 + 6x^3y^3 - 9y^6$

(9) 2499.96 (10) $1599\frac{5}{9}$

第十讲:

巩固练习: 1. (1) $+6xy$, $+3y$ (2) $-a$, $-\frac{1}{2}$ (3) $16y^2$, $x - 4y$

(4) 1, $1 - 5ab$ 2. A 3. (1) $\frac{1}{9}x^2 + \frac{2}{3}xy + y^2$ (2) $4a^2 - ab + \frac{1}{16}b^2$

(3) $x^2 - 6xy + 9y^2$ (4) $a^2 + 4ab + 4b^2$ (5) $-4a^2 + 12ab - 9b^2$

(6) 9940.09 (7) $-5x^2 - 12x + 10$ (8) $9a^2 + 16b^2 + c^2 + 24ab - 6ac - 8bc$

(9) $x^4 - 2x^2y^2 + y^4$ (10) $\frac{1}{81}a^4 - \frac{1}{8}a^2b^2 + \frac{81}{256}b^4$ (11) $-ab$

(12) $x^2 - 4xy + 4y^2 - 9$ 4. ± 6

第十一讲:

巩固练习: 一、 1. A 2. B 3. D 4. B 5. B 6. B 7. C 8. B

二、 1. 5, 1 2. 11

三、 1. $x^4 - 8x^2y^2 + 16y^4$, $\frac{1}{3}a^3b^2 - a^2b^3$, $4a^2 - 2ab^2 + \frac{1}{4}b^4$, $x^9 - x$

2. (1) 39204 (2) 99.75 (3) 478 (4) 39984 (5) $-99\frac{45}{49}$

(6) 10609 (7) 996004

3. (1) $-5x^2 + 10y^2 - 12xy$ (2) $x^8 - y^8$ (3) $a^2 - 4b^2 + 12b - 9$

(4) $2x^4 - 2y^4$ (5) $m^2 + n^2 + 9 - 2mn - 6m + 6n$ (6) $a^3 + 8b^3$

(7) $13x^2 - 25y^2$ (8) $2a^4 + 18a^2$ (9) $2a^4 - 18a^2$ (10) $x^2 - 6xy + 9y^2$

第十二讲:

巩固练习: 1. C 2. (1) $3a(2a^2 - 1)$ (2) $6x(4 - 3x^2 + 2x^3)$

(3) $-7x^2y^2(y - 3x)$ (4) $9m^2n^2(mn^2 - 3m^2n + 9)$

3. (1) $(x + y)^2(1 - x - y)$ (2) $(x - y)^2(1 - x + y)$ (3) $(y - x)^2(1 - y + x)$

(4) $(x - y)(1 - 3x + 3y)$ (5) $2ab(a + b)(2b - a)$ (6) $2x(x + y)(x - y)$

(7) $2a(a - 3)(4a + 1)$

第十三讲:

巩固练习: (1) $(a + 1)(a + 2)$ (2) $(a - 1)(a - 2)$ (3) $-(x + 5)(x - 3)$

(4) $-(x - 1)(x - 12)$ (5) $(x - 3y)(x - 8y)$ (6) $(a + 16b)(a - 2b)$

(7) $(x - 3)(5x - 2y)$ (8) $(2x - y - a)(2x - y + a)$ (9) $(1 - m + n)(1 + m - n)$

(10) $(3m - 1 - n)(3m - 1 + n)$

第十四讲:

例题: 一、 1. $a^2 + 2a + b$ 2. - 3. $4(m^2 + 2n^2)(m^2 - 2n^2)$ 4. -1, -2

5. 8 或 -2 6. $(x + 5)(x - 2)$ 7. $(x - 5y)(2a - b)$

二、 1. B 2. C 3. C 4. B 5. B 6. B 7. A 8. C 9. C 10. B 11. C 12. C
13. B 14. C 15. D

第十五讲:

巩固练习: 一、 1. A 2. B 3. D

二、 1. $(p - q)(m + 1)(m - 1)$ 2. $a^2(b + c)$ 3. $(x - y - 6z)^2$

4. $(x - 2a + 2b)(x + 2a - 2b)$ 5. $(x + y)(x + 3y)$ 6. $(x - 6)(x + 24)$

7. $(x^2 + 4)(x^2 - 2)$ 8. $-(m + 1)(m - 1)(m^2 - 17)$ 9. $x(x^2 + 2)(x + 2)(x - 2)$

10. $(x - 3)(x - 4)(x^2 - 7x - 2)$ 11. $-(2a + 3)(3a - 2)$

12. $(x + 2)(x - 1)(x^2 + x + 1)$ 13. $(x - y - xy - 1)(x - y + xy + 1)$

14. $(x^2 - 5x + 12)(x^2 - 5x - 2)$ 15. $(x + y)(x - y - 1)$ 16. $(a - b)(x^2 + x - 3)$

17. $(m + 1)^2(m - 1)^2$ 18. $(a - b)(a^2 + ab + 1)$

19. $-(a^2 - 2ab + 26b^2)(a - 6b)(a + 4b)$ 20. $(x + 2y - 7)(x + 2y + 5)$

21. $(m - a + 2b)(m + a - 2b)$

三、1. 0 4. $14k^2 + 8k + 50$ 5. 121

第十六讲:

巩固练习: 1. $-a^3b^6$ 2. $4(m - n)$ 3. $a^6, a^8b^8, (a + b)^5, x^5, (a - b)^8$

4. (1) $-3x^3y^2z$ (2) $\frac{8}{27}a^3$ 5. (1) $-3a^2b + 4a - 1$ (2) $\frac{1}{2}b + ab^2 - \frac{2}{3}$

6. (1) $a^2 + 2ab + b^2 - 1$ (2) $2b$ 7. $8a, 16$