

11. $27a^3 - 36a^2x + 48ax^2 - 64x^3$ and $3a + 4x$.
12. $x^{12} - x^9y^2 + x^6y^4 - x^3y^6 + y^8$ and $x^3 + y^2$.
13. $a^4 + 2a^3 + 3a^2 + 2a + 1$ and $a^2 - 2a + 1$.
14. $x^3 - ax^2 + a^2x - a^3$ and $x + a$.
15. $x^4 - 2x^3y + 3x^2y^2 - 2xy^3 + y^4$ and $x^2 + 2xy + y^2$.
16. $x^2 + ax + a^2$, $x^2 - ax + a^2$ and $x^4 - a^2x^2 + a^4$.

DIVISION.

EXERCISE XI.

Divide :

A.

1. x^5 by x^2 .
2. x^{10} by x^3 .
3. $3a^4$ by a^2 .
4. $27a^4$ by $3a^3$.
5. $35x^8$ by $7x^3$.
6. $81a^5$ by $-9a^2$.
7. $40x^{11}$ by $-5x^8$.
8. x^3y^3 by x^2y .
9. a^7x^4 by a^2x .
10. $4a^2b^2c^5$ by ab^2c^3 .
11. $15a^6b^6c^6$ by $-3a^4b^2c$.
12. $-20x^5y^3$ by $-4xy^2$.
13. $-48a^9$ by $-8a^2$.
14. $-35a^{10}$ by $-5a^5$.
15. $63a^7b^8c^9$ by $9a^5b^6c^7$.
16. $7a^2bc$ by $-7a^2bc$.
17. $-50y^3x^4$ by $-5yx^3$.
18. $18b^2yx^2$ by $-3xy$.
19. $-24a^4b^5c^6$ by $-3a^3b^4$.
20. $201a^3b^3x^3$ by -3 .

B.

1. $4x^5 + 6x^4 + 8x^2 + 10x$ by $2x$.
2. $3a^4 - 15a^3 - 18a^2$ by $-3a^2$.
3. $15a^3b^3 - 6a^2b^2 + 12ab$ by $-3ab$.
4. $36a^3b^3c^2 - 48a^2b^3c^3 + 60a^3b^2c^3$ by $4abc^2$.
5. $a^2 - ab + ac$ by $-a$.
6. $a^4 - a^3b + a^2b^2 - ab^3$ by a .
7. $34x^4y^3 - 51x^3y^2 + 68x^2y$ by $-17x^2y$.
8. $72x^5y^6 - 45x^4y^3 - 18x^2y^2$ by $9xy^2$.
9. $81m^8n^7 - 84m^5n^6 + 27m^3n^4p$ by $3m^2n^2$.
10. $169a^4b - 117a^3b^2 - 91a^2b$ by $13a^2$.
11. $361b^5c^4 + 228b^4c^5 - 133b^3c^5$ by $19b^3c^2$.
12. $-144x^4 + 108x^3y - 96x^2y^2 + 60xy^3$ by $-12x$.