-A demonstrative, pronominal simple.
$*$ ron-Singular number. nction-Used attributively to modify "promise."
5. Promise. Relation - "Promise is sweet."

Classification - A noun, common, aibstract, simple.
Inflection-Singular number, nominative case.
Function-Used abverbially as subject of "is sweet."
6. Us. Relation-"Sings us."

Classification-A personal pronoun, simple.
Inflection-First person, plural number, objective case.
Function-Used objectively as the indirect object of " sings."
7. In line (2) "can" is used as an auxiliary. In line'(4) "can" is used independently.
See H.S.G., chap. viii., sec. 138.

## Algebra.

## EXERCISE I.

Factor the following

| 1. $20 x-4$. | 12. $x^{3}+2 x^{2}-8 x-16$. |
| :--- | :--- |
| 2. $x^{2}-18 x+45$. | 13. $x^{3}+4 x^{2}-5 x-20$. |
| 3. $12 x^{2}+x-1$. | 14. $x^{3}-x^{2}-5 x-3$. |
| 4. $a x^{2}-b c \cdot x^{2}+a d x-b d$. | 15. $x^{3}+3 x^{2}-8 x-24$. |
| 5. $a^{3} x-a^{2} b x-6 a b^{2} x$. | 16. $a^{3}-5 a^{2} x+7 a x^{2}$ |
| 6. $2 x^{2}+9 \cdot x+4$. |  |
| 7. $3 x^{4}-16 x^{3}-12 x^{2}$. | 17. $x^{4}+x^{3}-3 x^{2}-x+2$. |
| 8. $4 x^{3}-3 x^{2}-24 x-9$. | 18. 2. $x^{3}-5 x^{2}+11 x+7$. |
| 9. $12 x^{3}-x^{2}-30 x-16$. | 19. $6 x^{3}-3 x^{3}-x^{2}-x-1$. |
| 10. $x^{3}-2 x^{2}-13 x-10$. | 20. $3 x^{3}-3 a x^{2}+2 a^{2} x$ |
| 11. $x^{3}-5 x^{2}-99 x+40$. | $-2 a^{3}$. |

EXERCISE 11.

$$
\begin{aligned}
& x^{4}+a x^{3}+a^{3} x+a^{4} \text {, 10. } 2 x^{3}+7 a x^{2}+4 a^{2} x \\
& 4 x^{3}-10 x^{2}+4 x+2 . \quad-3 a^{3} \\
& x^{3}+3 x^{2}-4 . \quad \text { 11. } a^{3}+2 a^{2}-13 a+10 \text {. } \\
& 729 x^{-6}-y^{6} \text { 12. } 4 x^{4}+11 x^{2}+25 \text {. } \\
& 10 x^{2}+79 x-8 . \quad \text { 13. } 1+2 x^{2}+x^{3}+2 x^{4} \text {. } \\
& 3 x^{3}+6 x^{2}-189 x . \quad 14 \cdot x^{3}-5 x^{2}+7 x-3 \text {. } \\
& a^{3}-8 b^{15} \quad \text { 15. } 3 a^{3}-3 a^{2} b+a b^{2}-b^{3} \\
& \text { 8. } x^{4}-x^{2}+2 x-1 \text { 16. } 5 x^{2}+11 x+2 \text {. } \\
& m^{3}-n^{3}-m^{\prime}\left(m^{2}-n^{2}\right) 17.60 x^{2} y+32 x y+4 y \text {. } \\
& +n(m-n)^{2} . \quad \text { 18. } x^{4}+a^{2} x^{2}+a^{4} .
\end{aligned}
$$

## EXERCISF III.

1. Find two factors of $\mathrm{x}^{3 \mathrm{n}}-\mathrm{y}^{3 \mathrm{~mm}}$ where m and n are positive integers.
2. Write the quotient of $16-8 \mathrm{ra}^{4}$ divided by $2-3$.
3. Find two factors of $x^{3}-y^{3}+1+3 x y$.
4. Prove that

$$
a(a+1)(a+2)(a+3)+1=\left(a^{2}+3 a+1\right)^{2} .
$$

5. Divide

$$
(\mathrm{ac}+\mathrm{bd})^{2}-(\mathrm{ad}+\mathrm{bc})^{2} \text { by }(\mathrm{a}-\mathrm{b})(\mathrm{c}-\mathrm{d}) \text {. }
$$

6. Find the product of $\mathrm{m}-\mathrm{n}-\mathrm{p}-\mathrm{q}$ and $\mathrm{m}+\mathrm{n}+\mathrm{p}+\mathrm{q}$.
7. Find the difference between the squares of 3503 and 3497 .
8. Multiply the square of the sum of the cubes of a and b by the cube of the sum of their squares.

## 9. Find the square root of

$$
\left(x^{2}-3 x+2\right)\left(x^{2}-4 x+3\right)\left(x^{2}-5 x+6\right) \text {; }
$$

10. Find a number such that if three-eighths of it be subtracted from 20 , and five-elevenths of the remainder from one-fourth of the original number, 12 times the second remainder shall be one-half the original number.
II. A farmer bought a certain number of sheep for £.57. Having lost eight of them, he sold the remainder at 8 s . a head more than they cost him, in order to make up the deficiency. How many did he buy?
11. A merchant bought some pieces of silk for $\$ 221$. Had he bought 4 pieces more for the same money, he would have paid $\$ 4$ less for each piece. How many did he buy?
12. A father gave his son a certain sum, telling him that at the end of every year he would give him as much as he then had left ; the son spent $\$ 100$ a year, and at the end of 4 years had nothing left. How much did he receive at first?

## Bookkeeping.

EXERCISE VI. IN APPENDIX TO H. S. B-K. PAGE 215.

TO BE FULLY ANSWERED IN OUR NEXT BY SINGLE ENTRY. 1896.

April 15.-Commenced business, investing as follows : Cash on deposit in Bank of Commerce, $\$ 1,000$. Goods in stock, $\$ 600$. Rent for $1 / 2$ month paid in advance, $\$ 16$. Office furniture on hand, $\$ 40$. I owe C. H. Laidlaw, on account, $\$ 25$.
April 16.-Bought of Turner \& Sons, Toronto, goods as per invoice No.-, \$160. Remitted in payment a draft purchased per cheque. Exchange 25 c . Paid freight per cheque, $\$ 10$. Cash sales, \$42.30.

April 17.-Sold C. H. Laidlaw on account, 15 yds. Can. tweed, at $\$ 1.20 ; 5$ yds. velvet, at $\$ 1.70$. Deposited in bank, cash, $\$ 20$. Paid cash for stationery, $\$ 2$ 10. Cash sales, $\$ 38.75$.

April 18.-Sold M. Langham 100 yds. $\frac{8}{4}$ sheeting, at $30 c$; 25 yds. farmer's satin, at 50 c . Received in payment an order on A. H. Wilson, which Mr. Wilson accepts. Cash sales, $\$ 19.90$.

April 21.-Deposited in bank, cash, $\$ 25$. Paid cash for coal oil, $\$ 1.20$. Cash sales, $\$ 25.65$.
April 22.-Lent K. L. Gibson cash, \$15. Gave General Hospital, per cheque, $\$ 7.50$. Cash sales, $\$ 32.90$.
April 24.-Bought of Caldwell \& Co., Hamilton, on my acceptance, at 30 days, payable at the Bank of Montreal, goods as per invoice No.-, \$8o. Paid freight per cheque, $\$ 2.30$. Cash sales, $\$ 25$.
April 25 :-A. H. Wilson settled his account in full with his note at to days payable at the Bank of Commerce. Cash sales, $\$ 42.60$.
April 27.-Sold S. W. Perry, 120 yds. English tweed, at $\$ 1.40$. Received in payment his cheque on Bank of Ottawa for $\$ 100$, the balance on account. Cash sales, $\$ 19.75$.
April 29.-Deposited in bank, cash, \$30. Paid cash for delivering goods, $\$ 1.20$. Cash sales, $\$ 27.85$.

