

Algebra 1
6.2 Preview

Name _____

Fill in the table.

| | | | |
|----------|----------|----------|---------|
| $1^2 =$ | $11^2 =$ | $1^3 =$ | $1^4 =$ |
| $2^2 =$ | $12^2 =$ | $2^3 =$ | $2^4 =$ |
| $3^2 =$ | $13^2 =$ | $3^3 =$ | $3^4 =$ |
| $4^2 =$ | $14^2 =$ | $4^3 =$ | $4^4 =$ |
| $5^2 =$ | $15^2 =$ | $5^3 =$ | $5^4 =$ |
| $6^2 =$ | $16^2 =$ | $6^3 =$ | $1^5 =$ |
| $7^2 =$ | $17^2 =$ | $7^3 =$ | $2^5 =$ |
| $8^2 =$ | $18^2 =$ | $8^3 =$ | $3^5 =$ |
| $9^2 =$ | $19^2 =$ | $9^3 =$ | $4^5 =$ |
| $10^2 =$ | $20^2 =$ | $10^3 =$ | $5^5 =$ |

Simplify each expression.

| | | | |
|---------------------|--------------------|---------------------|---------------------|
| 1. $\sqrt{121}$ | 2. $\sqrt{36}$ | 3. $\sqrt[3]{1000}$ | 4. $\sqrt[4]{16}$ |
| 5. $\sqrt[5]{32}$ | 6. $\sqrt[3]{27}$ | 7. $\sqrt{196}$ | 8. $\sqrt{81}$ |
| 9. $\sqrt{25}$ | 10. $\sqrt[3]{64}$ | 11. $\sqrt{16}$ | 12. $\sqrt[4]{625}$ |
| 13. $\sqrt[5]{243}$ | 14. $\sqrt{1}$ | 15. $\sqrt{289}$ | 16. $\sqrt{400}$ |
| 17. $\sqrt[3]{125}$ | 18. $\sqrt{9}$ | 19. $\sqrt[3]{8}$ | 20. $\sqrt{144}$ |
| 21. $\sqrt{49}$ | 22. $\sqrt{361}$ | 23. $\sqrt[4]{81}$ | 24. $\sqrt[3]{216}$ |