

Chapter 3 Quiz – 8th grade

Name: _____ Per. _____

1. Solve the equation $z^2 = 32$

2. Solve the equation $y^2 = \frac{25}{81}$

3. Evaluate $\sqrt{196}$

4. Evaluate $\sqrt[3]{-512}$

5. Solve the equation $x^3 = 1,728$

6. Solve the equation $c^3 = \frac{27}{1,000}$

7. A square postage stamp has an area of $1,180 \text{ mm}^2$. About how long is each side?8. A company is making building blocks. Each building block is a cube and has volume $\frac{64}{343} \text{ ft}^3$. How long is each side of the building blocks?**Simplify the following:**

9. $\left(\frac{x^6}{5}\right)^4 =$

10. $\frac{3^8}{3^4}$

11. $(7^3)^9$

12. $(5x^3)(4x^2)$

13. $\left(\frac{g^2}{f^5}\right)^3$

14. $(4a^3)^3$

15. $\frac{15x^6y^7}{-3x^2y}$

16. $\frac{6^7}{6^{11}}$

17. $\frac{6n^6}{3n^6}$

18. $\left(\frac{x^3}{3y}\right)^4$

19. $(-8a^3b)(9ab^3)$

20. $(5m^2n^3)^3$