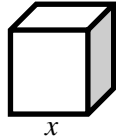


Study Guide 8th Grade
Unit 2 Troup County Schools

1. Simplify $(x^3)^{-4} x^3$ CC.8.EE.1
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2. Simplify $4^2 \cdot 4^{-3}$ CC.8.EE.1
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3. Which expression is equivalent to $(x^4)^{-5}$ CC.8.EE.1
-
4. Solve for x . $x^2 = 64$ CC.8.EE.2
-
5. Solve for x : $x^3 = 64$ CC.8.EE.2
-
6. What is the $\sqrt{121}$? CC.8.EE.2
-
7. If the volume of the cube is 125 units, what is the length of side x ? CC.8.EE.3
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8. About how many times greater is 12,000 miles than $3 \cdot 10^3$ miles? CC.8.EE.3
-
9. Evaluate. $(1.5 \cdot 10^5)(3.18 \cdot 10^{11})$ CC.8.EE.4
-
10. Which of the following has no solution? CC.8.EE.7a
- A. $2(x + 5) = 1 + 2x + 9$ B. $2x - 10 = x - 5$ C. $5x + 12 = 5(x + 4)$ D. $2x + 10 = 4x + 2$
-
11. Which of the following has infinite solutions? CC.8.EE.7a
- A. $2(x + 5) = 1 + 2x + 9$ B. $2x - 10 = x - 5$ C. $5x + 12 = 5(x + 4)$ D. $2x + 10 = 4x + 2$
-
12. Find the solution to the following equation. $6(x + 1) - 2x = 9x - 4$ CC.8.NS.7b
-
13. Evaluate 8^3 CC.8.EE.2
-
14. Which is an irrational number? CC.8.NS.1
- A. $\frac{7}{5}$ B. 1.8 C. $\frac{22}{7}$ D. 9.146592017492403...

15. Which of the following is a rational number?

CC.8.NS.1

- A. the square root of a prime number
 - B. the length of a side of a square with an area of 25cm^2
 - C. the non-terminating, non-repeating decimal
 - D. the length of the side of a square with an area of 5cm^2 .
-

16. Which statement **is true** about the following equation? $3(x - 3) = 3x - 3$

CC.8.EE.7a

- A. The equation has 1 solution.
 - B. The equation has 2 solutions.
 - C. The equation has no solution.
 - D. The equation has infinite solutions.
-

17. On a number line, $\sqrt{6}$ would fall between...

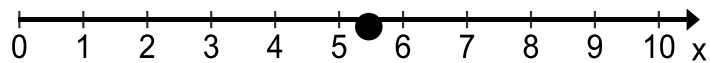
CC.8.NS.2

- A. 2.1 and 2.2
 - B. 2.4 and 2.5
 - C. 2.8 and 2.9
 - D. 3.1 and 3.2
-

18. Estimate $\sqrt{47}$ to the nearest tenth.

CC.8.NS.2

- A. 6.5
 - B. 6.9
 - C. 23.5
 - D. 24.5
-



19. Match the point on the number line above to the square root below.

CC.8.NS.2

- A. $\sqrt{5.5}$
 - B. $\sqrt{11}$
 - C. $\sqrt{30}$
 - D. $\sqrt{40}$
-

20. What is $2.35 \cdot 10^4$ in standard form?

CC.8.EE.3

21. Write $0.\overline{15}$ as a fraction.

22. Solve for x . $x^2 = \frac{4}{16}$