

Seventh Grade

Name:

Date:

1. $3^6 \times 3^{-14} =$

- A.** 3^{20} **B.** 3^{14} **C.** 3^{-8} **D.** 3^8

2. $|8 - 3| - |5 - 12| =$

- A.** -2 **B.** 2 **C.** 0 **D.** 5

3. a. 200000000000 in scientific notation is

- A.** 2×10^{-11} **B.** 2×3^{11} **C.** 2×10^{12} **D.** 2×10^{11}

b. 4×10^{-6} in standard notation is

- A.** 0.004 **B.** 0.000042 **C.** 0.000004 **D.** 0.00004

4. a. Which number is irrational?

- A.** $\sqrt{49}$ **B.** $1/3$ **C.** $\sqrt{6}$ **D.** 0

b. If $x = 4$, $6\sqrt{x} =$ _____

5. You buy a computer for 500 USD. There is a 20% discount and a 6% sales tax. How much money to you pay? _____

6. If $x = 2$ and $y = 5$, the value of $x^2y + 4x =$

- A.** 28 **B.** -5 **C.** 20 **D.** 62

7. Throw a coin twice.

a. Show all different outcomes

b. What is the probability of getting heads twice? _____

8. David buys a computer that cost 288 dollars. The manager decided to deduct one-fourth ($\frac{1}{4}$) of the sales price

Which expression is an approximation of what David pays after the deduction?

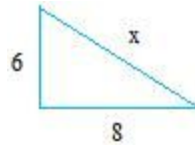
- A. 300×0.25 B. 300×0.025 C. $300 - 300 \times 0.25$ D. $300 + 300 \times 0.25$

9. Simplify $(2^5 \times 4^{10} \times 6^5) / (2^3 \times 4^{10} \times 6^6)$

- A. $\frac{4}{8}$ B. $\frac{1}{3}$ C. 1 D. $\frac{2}{3}$

10.

Find the length of x _____



11. Put the following equation in slope-intercept form. Then identify the slope and they-intercept

$$5 + y = 4x$$

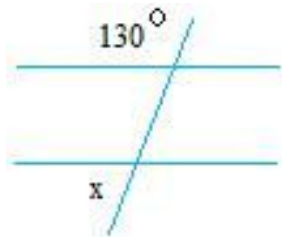
Slope-intercept form _____

Slope _____

y-intercept _____

12. x % of 120 is 36. What is x? _____

13. What is the measure of angle x? _____



14. A box has the following dimensions

length = 6 cm, width = 8 cm, and height = 3 cm

The volume and surface area are :

A. $V = 144 \text{ cm}^3$ and $SA = 180 \text{ cm}^2$

B. $V = 144 \text{ cm}^3$ and $SA = 110 \text{ cm}^2$

C. $V = 120 \text{ cm}^3$ and $SA = 180 \text{ cm}^2$

D. $V = 164 \text{ cm}^3$ and $SA = 174 \text{ cm}^2$

15. Solve for x.

$$-4x + 5 = 29$$

16. If your car can take you 85 miles away with 5 gallons of gas. How many gallons do you need to go 2035 miles away?