

# Printable 7th grade math test

Name \_\_\_\_\_

Date: \_\_\_\_\_

Solve the following problems

1.

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

- 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. 20000000000 in scientific notation is

- A.  $2 \times 10^{-11}$    B.  $2 \times 3^{11}$    C.  $2 \times 10^{12}$    D.  $2 \times 10^{11}$

b.  $4 \times 10^{-6}$  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  $x = 4$ ,  $6\sqrt{(25)} =$  \_\_\_\_\_

5.

a. Which property is illustrated below?

$$x \times (2 + 5) = x \times 2 + x \times 5$$

- A. commutative property of addition   B. Distributive property   C. Distributive property of multiplication   D. Multiplicative inverse

b.  $(122 + x) \times 1 = 122 + x$  is an example of

- A. Identity property   B. Distributive property of multiplication   C. Identity property of addition   D. Identity property of multiplication

6.

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

7.

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

- A. 28   B. -5   C. 20   D. 62

8.

Graph  $(2, 6)$  and  $(-1, 0)$  on the coordinate system and find the slope using  $m = \text{rise} / \text{run}$

9.

Throw a coin twice.

a. Show all different outcomes

b. What is the probability of getting heads twice? \_\_\_\_\_

10.

Find the inequality below and then solve it \_\_\_\_\_

$$x + 5 = 2$$

$$2 + 0 = 2$$

$$3x + 2 > 11$$

$$4x + 9$$

11.

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

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

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

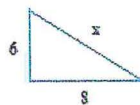
12.

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

- A.  $4/8$    B.  $1/3$    C. 1   D.  $2/3$

13.

Find the length of  $x$  \_\_\_\_\_



14.

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

$$5 + y = 4x$$

Slope-intercept form \_\_\_\_\_

Slope \_\_\_\_\_

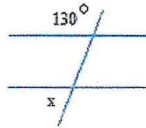
y-intercept \_\_\_\_\_

15.

x% of 120 is 36. What is x? \_\_\_\_\_

16.

What is the measure of angle x? \_\_\_\_\_



17.

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

18.

Solve for x.

$$-4x + 5 = 29$$

19.

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?

20.

The sum of two consecutive even numbers is 42. What are the two numbers? (Hint: Let the numbers be  $2n$  and  $2n + 2$ )