

Practice Test #2

<http://www.4tests.com/ged-2014>

1) Simplify the following using scientific notation:

$$(8.76 \times 10^9)(6.52 \times 10^{-3})/13.27 \times 10^5$$

- ☐  $4.3 \times 10^1$
- ☐  $0.43 \times 10^1$
- ☐  $43 \times 10^{-1}$
- ☐  $43.06 \times 10^{-2}$

2) Simplify the following using scientific notation:

$$(83.9 \times 10^{12})(2.87 \times 10^{-3})/3.76 \times 10^2$$

- ☐  $0.6404 \times 10^{-1}$
- ☐  $6.404 \times 10^{18}$
- ☐  $64.04 \times 10^{-1}$
- ☐  $6.404069148 \times 10^8$

3) Sort the following fractions in ascending order:

$$7/8, 9/10, 16/20$$

- ☐  $9/10, 7/8, 16/20$
- ☐  $7/8, 9/10, 16/20$
- ☐  $16/20, 7/8, 9/10$
- ☐  $7/8, 16/20, 9/10$

4) Divide these fractions and choose the correct answer from the options listed below.

$2^{1/3} / 7^{3/8}$  (this is 2 and one third divided by 7 and three eighths)

- ☐  $65/177$
- ☐  $56/177$
- ☐  $177/56$
- ☐  $177/65$

5) An investor invests \$2,500 into a mutual fund and earns 5.75% on the principle for each of three years. How much interest has accrued at the end of the period?

- ☐ \$413.25
- ☐ \$4,132.50
- ☐ \$431.25
- ☐ \$571.00

6) Use order of operations to solve for the following:

$$3(4-7)^2 + 10/5$$

- ☐ 29
- ☐ 83
- ☐ 18.2
- ☐ 6
- ☐ 5

7) Disregard this problem.

8) Solve for n.

$$n + 28 = -84$$

- ☐ 56
- ☐ -56
- ☐ 112
- ☐ -112

9) Solve using the substitution method.

$$\begin{aligned} y &= 3x - 2 \\ 3x + 4y &= 22 \end{aligned}$$

- ☐  $x=3$   
 $y=5$
- ☐  $x=5$   
 $y=3$
- ☐  $x=2$   
 $y=4$
- ☐  $x=4$   
 $y=2$

10) If a class has 10 men and 14 women, what is the ratio of men to the class?

- ☐ 10:14
- ☐ 14:10
- ☐ 14:24
- ☐ 10:24

11) If rope costs \$3.20 per yard, or \$0.15 per inch, which is the better deal?

NOTE: 1 yard equals 3 feet equals 36 inches

- ☐ 15 cents per inch
- ☐ \$3.20 per yard

- ☐ Both are the same.
- ☐ Information provided is not enough to determine an answer.

12) Which of the following ratio pairs forms a proportion?

- ☐  $\frac{3}{5} = \frac{15}{26}$
- ☐  $\frac{17}{20} = \frac{51}{60}$
- ☐  $\frac{3}{8} = \frac{65}{160}$
- ☐  $\frac{4}{7} = \frac{12}{28}$

13) The line connecting points (3,-6) and (-9,2) has slope:

- ☐  $-\frac{2}{3}$
- ☐  $\frac{2}{3}$
- ☐  $-\frac{8}{10}$
- ☐  $\frac{8}{12}$

14) A line with the coordinates (7,y) and (-2,-4) has slope  $\frac{3}{4}$ . What is the value of y?

- ☐ 2.75
- ☐ 6
- ☐ -6
- ☐ -2.75

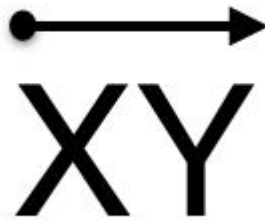
15)



XY is called a:

- ☐ line segment
- ☐ line
- ☐ ray
- ☐ ray segment

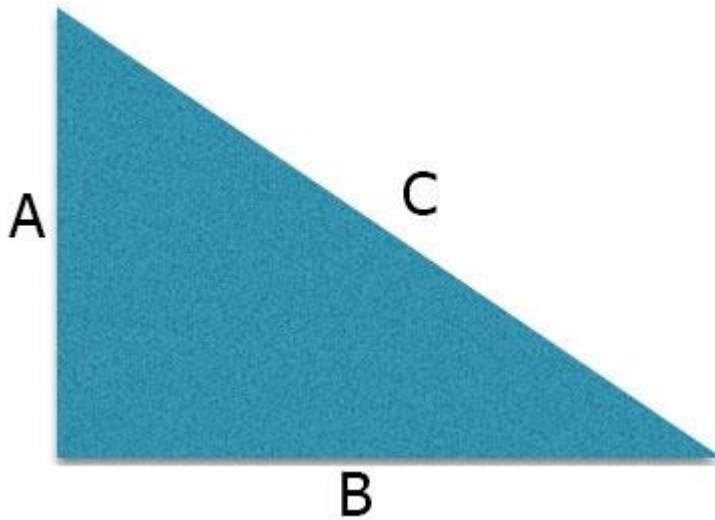
16)



XY is called a:

- ☐ ray
- ☐ ray segment
- ☐ line
- ☐ line segment

17)



Solve for b:

$$\begin{aligned}a &= 14 \\ b &= ? \\ c &= 50\end{aligned}$$

- ☐  $b=44$
- ☐  $b=50$
- ☐  $b=48$
- ☐  $b=-48$

18) Two supplementary angles have measures of  $9x$  degrees and  $3x$  degrees. What is the measure of the longer angle?

- ☐ 180 degrees
- ☐ 45 degrees
- ☐ 135 degrees
- ☐ 15 degrees

19) Determine the coordinates for the midpoint of a segment with the following endpoints:  $(12,-8)$  and  $(8,-4)$ .

- ☐  $(-10,6)$
- ☐  $(6,-10)$
- ☐  $(-6,-10)$
- ☐  $(10,-6)$

20) A triangle has an area of 110 square inches and a base of 15 inches. Which answer best pinpoints the height?

- ☐ 14 inches
- ☐ 18 inches

- ☐ 18.66 inches
- ☐ 14.66 inches

21) A great circle of a sphere lies on its surface and contains its center. What is the circumference of a great circle of a sphere that has a surface area that measures 1,476 square centimeters?

NOTE:  $\pi$  (or Pi) equals 3.14.

- ☐ Approximately 68.1
- ☐ 74.5
- ☐ 86.1
- ☐ 54.7

22) What is the mean of this data set?

8, 47, 13, 17, 26, 32

- ☐ 23.83
- ☐ 23.79
- ☐ 23.62
- ☐ 24

23) What is the median of this data set?

17, 42, 53, 97, 102, 82

- ☐ 76.5
- ☐ 53
- ☐ 67.5
- ☐ 42

24) There are three books sold in different quantities. A \$10 book sells six copies. A \$5 book sells five copies. A \$2 book sells three copies. What is the median price of the

book?

- ☐ \$6.50
- ☐ \$6.20
- ☐ \$5.00
- ☐ \$5.25

25) Identify mode for the following data:

2, 2, 2, 2, 7, 7, 7, 7, 7, 7, 9, 9, 9, 11, 11, 13, 12, 9, 9, 9, 2, 7, 7, 7

- ☐ 2
- ☐ 7
- ☐ 11
- ☐ 9

26) Solve using the substitution method:

NOTE: Round long decimals to the nearest one hundredth.

$$\begin{aligned}y &= 3x - 87 \\ 3x + 2y &= 21\end{aligned}$$

- ☐  $x = -21.67$   
 $y = 21.99$
- ☐  $x = 21.67$   
 $y = -21.99$
- ☐  $x = 21.67$   
 $y = 21.99$
- ☐  $x = -21.99$   
 $y = -21.67$

27) If the product of 6 and an integer,  $n$ , is increased by 13, the result is -14. What is the value of  $n$ ?



- ☐ -4.5
- ☐ 4.5
- ☐ 162
- ☐ 148

28) Solve for the positive value of c.

$$9c^2 - 11 = 718$$

- ☐ 6
- ☐ 9
- ☐ 11
- ☐ 4

29) Solve for x:

$$-5x - 5 > 15$$

- ☐  $x > -4$
- ☐  $x < -4$
- ☐  $x = -4$
- ☐  $x = -4$

30) Solve for x:

$$-2(5 - 3x) = 12 - 3(5 - x)$$

- ☐  $\frac{7}{6}$
- ☐  $-\frac{7}{6}$
- ☐  $\frac{7}{3}$
- ☐  $-\frac{7}{3}$