

Elementary Algebra Final Review Practice Quiz 01 - Be Sure to Click View Results at the Very End to See How you Did!!

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Start time: December 4, 2008 5:06am

Time allowed: 90 minutes

Number of questions: 25

Finish

Help

Question 1 (4 points)**Opposites and absolute value**

Evaluate.

$$-|-7|$$

- a. ± 7
- b. 7
- c. -7
- d. $\frac{1}{7}$

Save answer

Question 2 (4 points)**Add and subtract rational expressions with different denominators**

Simplify.

$$\frac{4}{x+8} + \frac{7}{x-8}$$

- a. $\frac{11}{x^2 - 64}$
- b. $\frac{11x + 24}{x^2 - 64}$
- c. $\frac{11}{x + 8}$
- d. $\frac{11x + 24}{11}$

Save answer

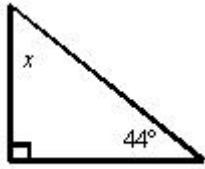
Question 3 (4 points)**Simplify numerical radical expressions**

Simplify.

$$\sqrt{72}$$

- a. $6\sqrt{2}$
- b. $3\sqrt{24}$
- c. $8\sqrt{3}$
- d. $24\sqrt{3}$

Save answer

Question 4 (4 points)**Problems involving the angles of a triangle**Which is the measure of x ?

- a. 92
- b. 46
- c. 134
- d. 136

Question 5 (4 points)**Factor trinomials of the form $x^2 + bx + c$**

Factor.

$$x^2 + 5x + 6$$

- a. $(x + 2)(x - 3)$
- b. $(x - 2)(x + 3)$
- c. $(x - 2)(x - 3)$
- d. $(x + 2)(x + 3)$

Question 6 (4 points)**Investment problems**

An investment club wants to invest \$27,000 in two simple interest accounts. One account earns 4.7% annual simple interest and the other account earns 8.2% annual simple interest. How much should be invested in each account so that both accounts earn the same annual interest?

- a. \$9837.21 at 4.7%; \$17,162.79 at 8.2%
- b. \$17,162.79 at 4.7%; \$9837.21 at 8.2%
- c. \$17,443.79 at 4.7%; \$9556.21 at 8.2%
- d. \$9556.21 at 4.7%; \$17,443.79 at 8.2%

Question 7 (4 points)**Simplify variable expressions using the Properties of Addition**

Simplify.

$$7x + 6y - 2x - 3y$$

- a. $9x + 9y$
- b. $9x + 3y$
- c. $5x + 3y$
- d. $5x + 9y$

Save answer

Question 8 (4 points)

Graph a line using the slope and y-intercept

Draw the graph of the line with a y-intercept of -1 and slope of $-\frac{1}{3}$

Equation:

Save answer

Question 9 (4 points)

Coin and stamp problems

A stamp collector has 7¢ stamps and 20¢ stamps. The number of 7¢ stamps is nine less than twice the number of 20¢ stamps. The total value of the stamps is \$1.75. Find the number of both types of stamps in the collection.

- a. 7¢ stamps: 5; 20¢ stamps: 8
- b. 7¢ stamps: 7; 20¢ stamps: 5
- c. 7¢ stamps: 23; 20¢ stamps: 7
- d. 7¢ stamps: 5; 20¢ stamps: 7

Save answer

Question 10 (4 points)

Solve equations of the form $x + a = b$

Solve.

$$s - 6 = 12$$

- a. -18
- b. -11
- c. 18
- d. 6

Save answer

Question 11 (4 points)

Solve equations by factoring

Solve by factoring.

$$-6x^2 - 7x + 3 = 0$$

- a. $\frac{3}{2}, -\frac{1}{3}$
- b. $\frac{3}{2}, \frac{1}{3}$
- c. $-\frac{3}{2}, -\frac{1}{3}$
- d. $-\frac{3}{2}, \frac{1}{3}$

Save answer

Question 12 (4 points)**Add and subtract rational expressions with the same denomina**

Simplify.

$$\frac{-5x+9}{x^2-25} - \frac{-6x+4}{x^2-25}$$

- a. $\frac{x+13}{x^2-25}$
- b. $\frac{1}{x+5}$
- c. $\frac{1}{x-5}$
- d. $-\frac{1}{x-5}$

Save answer

Question 13 (4 points)**Add and subtract rational expressions with different denomin**

Simplify.

$$\frac{6}{x^2-17x+72} - \frac{5}{x-8}$$

- a. $\frac{-5x+51}{x^2-17x+72}$
- b. $\frac{-5x-39}{x^2-17x+72}$
- c. $\frac{1}{x^2-18x+80}$
- d. $\frac{-5x-3}{x^2-17x+72}$

Save answer

Question 14 (4 points)**Subtract polynomials**

Simplify.

$$(-3x^5 - 6x) - (-4x - 2 + 8x^5)$$

- a. $x^5 + 2x - 2$
- b. $-11x^5 - 2x + 2$
- c. $5x^5 + 2x + 2$
- d. $2x^5 - 10x - 2$

Save answer

Question 15 (4 points)**Divide a polynomial by a monomial**

Simplify.

$$\frac{-20x^5 - 4x^3 + 8x}{4x^4}$$

- a. $-5x^5 - \frac{1}{x} + \frac{2}{x^3}$
- b. $-5x - \frac{1}{x} + \frac{2}{x^3}$
- c. $-20x^5 - 4x + 2$
- d. $-5x - 4x^3 + 8x$

Save answer

Question 16 (4 points)

Solve equations of the form $ax = b$

Solve.

$$-17 = -5y$$

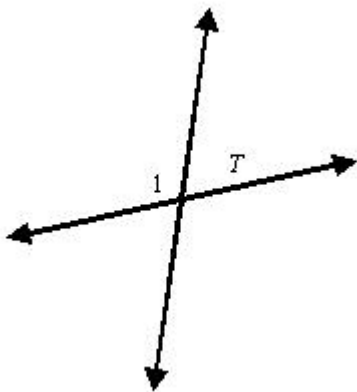
Equation:

Save answer

Question 17 (4 points)

Problems involving angles formed by intersecting lines

The measure of $\angle 1$ is 107. Which is the measure of $\angle T$?



- a. 73
- b. 163
- c. 253
- d. 68

Save answer

Question 18 (4 points)

Multiply monomials

Simplify.

$$(-3x^2y)(5x^4y)$$

- a. $15x^6y^2$
- b. $-15x^8y$
- c. $15x^2y$
- d. $-15x^6y^2$

Save answer

Question 19 (4 points)

Solve equations of the form $x + a = b$

Solve.

$$x + 5 = -3$$

- a. -2
- b. -8
- c. 8
- d. 2

Save answer

Question 20 (4 points)

Multiply two binomials

Simplify.

$$(2u - 7)(2u + 9)$$

- a. $4u^2 + 4u - 64$
- b. $4u^2 - 3u - 64$
- c. $4u^2 + 4u - 63$
- d. $4u^2 + 32u - 63$

Save answer

Question 21 (4 points)

Evaluate variable expressions

Evaluate $x + y$ when $x = -\frac{9}{10}$ and $y = -\frac{3}{5}$.

- a. $-\frac{3}{10}$
- b. $\frac{3}{10}$
- c. $-\frac{3}{2}$
- d. $\frac{3}{2}$

Save answer

Question 22 (4 points)

Find the equation of a line using the point-slope formula

Which shows the equation of a line, in slope-intercept form, that passes through the point

$(4, 2)$ with slope -4 ?

- a. $y = -4x + 2$
- b. $y = 4x + 2$
- c. $y = -4x + 18$
- d. $y = 4x + 18$

Save answer

Question 23 (4 points)

Markup problems

A struggling furniture store owner determines that in order to make a profit, she must set a 27% markup rate for every item in her store. Find the markup on a sofa that cost the owner \$175 to stock.

- a. \$112.00
- b. \$23.63
- c. \$47.25
- d. \$140.00

Save answer

Question 24 (4 points)

Consecutive integer problems

The sum of three consecutive odd integers is 183. What is the largest of the three integers?

- a. 63
- b. 66
- c. 62
- d. 55

Save answer

Question 25 (4 points)

Multiply rational expressions

Simplify.

$$\frac{x^2}{x-9} \cdot \frac{x^2 - 12x + 27}{x^2 - 3x}$$

- a. $\frac{-12x + 27}{27x}$
- b. $\frac{x^2 - 3x}{x - 3}$
- c. $\frac{x^2 + 3x}{x - 3}$
- d. x

Save answer

Finish

Help