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

Name: David Hays (Preview)
Start time: December 4, 2008 5:07am
Time allowed: 90 minutes
Number of questions: 25

Finish Help

Question 1 (4 points)

Factor the difference of two squares and perfect-square trin

Factor.

$16z^2 - 40z + 25$

a. $(4z-5)^2$

b. $(4z-5)(4z+5)$

c. $(4z+5)^2$

d. $(4z-25)(5z+1)$

Save answer

Question 2 (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 3 (4 points)

Add and subtract rational expressions with different denomin

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 4 (4 points)

Factor trinomials of the form ax^2 + bx + c using trial fact

Factor.

$12x^2+23x+5$

a. $(4x-1)(3x+5)$

b. $(4x+1)(3x+5)$

c. $(4x-1)(3x-5)$

d. $(4x+1)(3x-5)$

Save answer

Question 5 (4 points)

Integer exponents

Simplify.

$\frac{(6xy)^4}{(-7x)^4}$

a. $\frac{1296y^4}{2401}$

b. $\frac{2401}{1296y^4}$

c. $-\frac{7}{6y}$

d. $-\frac{6y}{7}$

Save answer

Question 6 (4 points)

Add integers

Add.

$8+(-13)$

a. 5

b. 21

c. -21

d. -5

Save answer

Question 7 (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 8 (4 points)

Subtract polynomials

Simplify.

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

a. $x^5 + 2x - 2$

b. $-11x^5 - 2x + 2$

c. $5x^5 + 2x + 2$

d. $2x^5 - 10x - 2$

Save answer

Question 9 (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. $\dfrac{x+13}{x^2-25}$

b. $\dfrac{1}{x+5}$

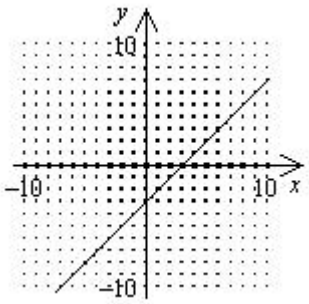
c. $\dfrac{1}{x-5}$

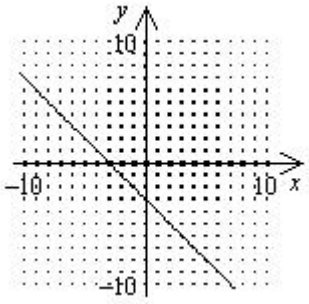
d. $-\dfrac{1}{x-5}$

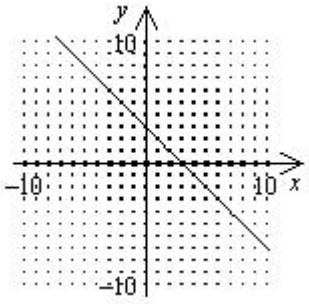
Save answer

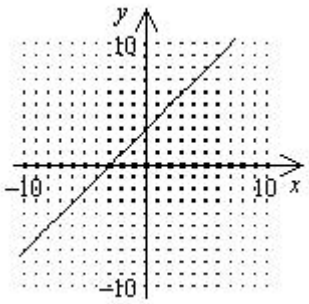
Question 10 (4 points)

Graph equations of the form y = mx + b
Which is the graph of $y = x + 3$?

a.


b.


c.


d.


Save answer

Question 11 (4 points)

Factor trinomials of the form ax^2 + bx + c using trial fact
Factor.
$4x^2 - 4x - 15$

a. $(2x+5)(2x-3)$

b.

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

c. $(2x+5)(2x+3)$

d. $(2x-5)(2x+3)$

Save answer

Question 12 (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 13 (4 points)

Solve proportions

Solve.

$\frac{x-7}{3}=\frac{5}{9}$

a. $\frac{26}{3}$

b. $-\frac{16}{3}$

c. 78

d. $\frac{3}{26}$

Save answer

Question 14 (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 15 (4 points)

Divide polynomials

Simplify.

$$\frac{4q^2+3q+1}{q-5}$$

a. $4q-17$, r –114

b. $5q-23$, r –116

c. $5q+23$, r 114

d. $4q+23$, r 116

Save answer

Question 16 (4 points)

Find the slope of a straight line

Find the slope of the line that contains $(-6, -9)$ and $(-5, 7)$.

a. $\frac{11}{2}$

b. $\frac{1}{16}$

c. $\frac{2}{11}$

d. 16

Save answer

Question 17 (4 points)

Solve general inequalities

Solve.

$-3x-5<-8$

a. $x<1$

b. $x>\frac{13}{3}$

c. $x\leq\frac{13}{3}$

d. $x>1$

Save answer

Question 18 (4 points)

Add integers

Add.

$-9+(-14)$

a. 5

b. -23

c. 23

d. -5

Save answer

Question 19 (4 points)

Factor a monomial from a polynomial

Factor.

$8x^5 - 6x^8$

a. $2x^5(4-3x^3)$

b. $x^5(8-6x^3)$

c. $2(4x^5-3x^8)$

d. $2x^4(4x-3x^7)$

Save answer

Question 20 (4 points)

Perimeter problems

Find the perimeter of a triangle with sides 8 inches, 19 inches, and 21 inches in length.

a. 48 in.

b. 40 in.

c. 46 in.

d. 27 in.

Save answer

Question 21 (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: Create equation Equation editor

Save answer

Question 22 (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 23 (4 points)

Solve general inequalities

Solve.

$x-4+(x+6)>0$

- a. $x<1$
- b. $x>1$
- c. $x>-1$
- d. $x<-1$

Save answer

Question 24 (4 points)

Add and subtract rational expressions with different denomin

Simplify.

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

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

Save answer

Question 25 (4 points)

Opposites and absolute value

Evaluate.

$-|-7|$

- a. ± 7
- b. 7
- c. -7
- d.

$$\frac{1}{7}$$

Save answer

Finish Help