socrative

College Algebra Placement - Test 2 Score:

1. **Which of the following is the least?**

(A) 0.105
(B) 0.501
(C) 0.015
(D) 0.15
(E) None

2. **All of the following are ways to write 25 percent of N EXCEPT**

(A) (0.25)N
(B) (25/100) N
(C) 1/4 N
(D) 25N
(E) None

3. **Which of the following is closest to 27.8 × 9.6?**

(A) 280
(B) 300
(C) 2800
(D) 3000
(E) None

4. **A soccer team played 160 games and won 65 percent of them. How many games did the team win?**

(A) 94
(B) 104
(C) 114
(D) 124
(E) None

5. There are 3 people who work full-time and are to work together on a project, but their total time on the project is to be equivalent to that of only one person working full-time. If one of the people is budgeted for 1/2 of his time to the project and a second person for 1/3 of her time, what part of the third worker's time should be budgeted to this project?

A 1/8
B 1/6
C 1/3
D 3/5
E None

6. 32 is 40% of what number?

A 12.8
B 128
C 80
D 800
E None

7. 3 1/3 - 2 2/5

A 1/15
B 14/15
C 1 1/15
D 1 1/2
E None

8. 2 1/2 + 4 2/3

A 6 1/6
B 6 5/6
C 7 1/6
D 7 5/6
E None

9. Without a calculator, What is 1,345/99 rounded to the nearest integer?

A 12
B 13
C 14
D 15
E None

10. Three of four numbers have a sum of 22. If the average of the four numbers is 8, what is the fourth number?

A) 4

B) 6

C) 8

D) 10

E) None

11. $46.2 \times 10^{-2} =$

A) 0.0462

B) 0.462

C) 4.62

D) 462

E) None

12. If 3/2 ÷ 1/4 = n, then n is between

A) 1 and 3

B) 3 and 5

C) 5 and 7

D) 7 and 9

E) None

13. Without a calculator, What is 12% of 120?

A) 10

B) 14.4

C) 18.4

D) 28.8

E) None

14. A box in a college bookstore contains books, and each book in the box is a history book, an English book or a science book. If 1/3 of these books are history books and 1/6 are English books, what fraction of the books are science books?

A) 1/3

B) 1/2

C) 2/3

D) 0.75

E) None

15. The measures of two angles of a triangle are 35° and 45°. What is the measure of the third angle of the triangle?

A) 95 degrees

B) 100 degrees

C) 105 degrees

D) 110 degrees

E) None

16. Erica bought 3 1/2 yards of fabric. If she uses 2/3 of the fabric to make a curtain, how much will she have left?

A) 1/6 yard

B) 1/3 yard

C) 1 1/6 yards

D) 2 1/3 yards

E) None

17. Jen wants to tile the floor of her kitchen. The floor is rectangular and measures 12 feet by 8 feet. If it costs $2.50 per square foot for the materials, what is the total cost of the materials for tiling the kitchen floor?

A) 160

B) 200

C) 220

D) 240

E) None

18. $\sqrt{2} \times \sqrt{15} = ?$

A) $\sqrt{17}$

B) $\sqrt{30}$

C) 17

D) 30

E) None

19. What is the value of the expression $2x^2 + 3xy - 4y^2$ when $x = 2$ and $y = -4$?

A) -80

B) -32

C) 32

D) 80

E) None

20. $(3x - 2y)^2$

(A) $9x^2 - 4y$

(B) $9x^2 - 4y^2$

(C) $9x^2 - 6xy + 4y^2$

(D) $9x^2 - 12xy + 4y^2$

(E) None

21. IF X > 2, then $(x^2 - x - 6)/(x^2 - 4) =$

(A) $(x - 3)/2$

(B) $(x - 3)/(x - 2)$

(C) $(x - 3)/(x + 2)$

(D) 3/2

(E) None

22. $(4 - (-6))/-5 =$

(A) -2

(B) -2/5

(C) 2/5

(D) 2

(E) None

23. If $2x - 3(x + 4) = -5$, then x =

(A) -17

(B) -7

(C) 7

(D) 17

(E) None

24. $20 - {}^4/_5\,x \geq 16$ Which one of the following inequalities is equivalent to the inequality shown above?

(A) $x \leq 5$

(B) $x \geq 5$

(C) $x \leq 65/2$

(D) $x \geq 65/2$

(E) None

25. For which of the following equations are x = 5 and x = -5 both solutions?

(A) $x^2 + 25 = 0$

(B) $x^2 - 25 = 0$

(C) $x^2 + 10x - 25 = 0$

(D) $x^2 - 5x - 25 = 0$

(E) None

26. The graph of which of the following equations is a straight line parallel to the graph of y = 2x?

(A) 4x - y = 4

(B) 2x - 2y = 2

(C) 2x - y = 4

(D) 2x + y = 2

(E) x - 2y = 4

27. An equation of the line that contains the origin and the point (1,2) is

(A) y = 2x

(B) 2y = x

(C) y = x - 1

(D) y = 2x + 1

(E) $y/_2 = x - 1$

28. An apartment building contains 12 units consisting of one and two-bedroom apartments that rent for $360 and $450 per month, respectively. When all units are rented, the total monthly rental is $4,950. What is the number of two-bedroom apartments?

Hint: Use a system of equations. Let x = Number of one bedroom apartments and y = Number of 2 bedroom apartments.

(A) 3

(B) 4

(C) 5

(D) 6

(E) 7

29. If $\log_{10} x = 3$, then x =

(A) 3^{10}

(B) 1,000

(C) 30

(D) 10/3

(E) 3/10

30. 5y(2y - 3) + (2y - 3) =

(A) (5y + 1)(2y + 3)

(B) (5y + 1)(2y - 3)

(C) (5y - 1)(2y + 3)

(D) (5y - 1)(2y - 3)

(E) 10y(2y - 3)