Accuplacer Sample Questions Math Only

There is one general math test for RCC no matter what your acdemic goals. Taking the math test can place you anywhere from Math 51 (Arithmetic) to Math 1A (Calculus) depending on your personal skill levels. However, there are three sections within the test: **Arithmetic**, **Elementary Algebra** and **College Level Math**. You will begin with one section and, depending on your performance, may be branched into others. Determination of which secton you begin with is based upon your previous experieice in math classes.

ARITHMETIC

Solve the following TWELVE *problems and select your answer from the alternatives given. (Answers are on page 7).*

Question 1

2.75 + .003 + .158 =

A. 4.36

B. 2.911

C. 0.436

D. 2.938

Question 2

7/20 is equal to

A. 0.035

B. 0.858

C. 0.35

D. 3.5

Question 3

7.86 X 4.6 =

A. 36.156

B. 36.216

C. 351.56

D. 361.56

Question 4

The Number of Employees of Company K Who Were Involved in Accidents	Plant X	Plant Y
Mechanics	11	30
Power Machine Operators	9	12

The table above show the results of an industrial health survey of 10,000 people employed at Company K for more than 5 years. If 2,500 employees were surveyed in each of the four categories, which group of employees had the highest accident rate?

A. Mechanics in Plant X

B. Mechanics in Plant Y

C. Power Machine Operators in Plant X

D. Power Machine Operators in Plant Y

Question 5

Which of the following is the least?

    A. 0.105

    B. 0.501

    C. 0.015

    D. 0.15

Question 6

Which of the following is closest to
27.8 X 9.6

    A. 280

    B. 300

    C. 2,800

    D. 3,000

Question 7

Which of the following is closest to
$\sqrt{10.5}$?

    A. 3

    B. 4

    C. 5

    D. 8

Question 8

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

    A. 94

    B. 104

    C. 114

    D. 124

Question 9

Three people who work full time 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. 1/3

    B. 1/4

    C. 1/6

    D. 1/8

Question 10

32 is 40% of what number?

    A. 12.8

    B. 128

    C. 80

    D. 800

Question 11

All of the following are ways to write
20 percent of N, EXCEPT

    A. $0.20\,N$

    B. $\dfrac{20\,N}{100}$

    C. $\dfrac{1\,N}{5}$

    D. $20\,N$

Question 12

$$3\frac{1}{3} - 2\frac{2}{5} =$$

        A. $1\frac{1}{2}$

        B. $\frac{1}{15}$

        C. $\frac{14}{15}$

        D. $1\frac{1}{15}$

ELEMENTARY ALGEBRA

Solve the following TWELVE *problems and select your answer from the alternatives given. (Answers are on page 7.)*

Question 1

If a number is divided by 4, and then 3 is subtracted, the result is 0.
What is the number?

    A. 12

    B. 4

    C. 3

    D. 2

Question 2

$$\sqrt{2} \cdot \sqrt{15} = ?$$

    A. 17

    B. 30

    C. $\sqrt{30}$

    D. $\sqrt{17}$

Question 3

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

    A. -80

    B. 80

    C. -32

    D. 32

Question 4

If A represents the number of apples purchased at 15 cents each and B represents the number of bananas purchased at 10 cents each, which of the following represents the total value of the purchases?

        A. A + B

        B. 25(A + B)

        C. 10A + 15B

        D. 15A + 10B

Question 5

In the figure below, both circles have the same center, and the radius of the larger circle is R. If the radius of the smaller circle is 3 units less than R, which of the following represents the area of the shaded region?
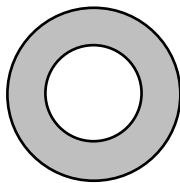
        A. ΠR^2

        B. $\Pi (R - 3)^2$

        C. $\Pi R^2 - \Pi - 3^2$

        D. $\Pi R^2 - \Pi (R - 3)^2$

Question 6

16x - 8 =

        A. 8x

        B. 8(2x-x)

        C. 8(2x-1)

        D. 8(2x-8)

Question 7

$$\frac{4 - (- 6)}{-5} =$$

        A. $\dfrac{2}{5}$

        B. $-\dfrac{2}{5}$

        C. 2

        D. – 2

Question 8

$$\frac{x^2 - x - 6}{x^2 - 4} =$$

A. $\dfrac{x - 3}{2}$

B. $\dfrac{x - 3}{x - 2}$

C. $\dfrac{x - 3}{x + 2}$

D. $\dfrac{3}{2}$

Question 9

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

A. 7

B. - 7

C. 17

D. -17

Question 10

$(3x - 2y)^2 =$

A. $9x^2 - 4y^2$

B. $9x^2 + 4y^2$

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

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

Question 11

$-3(5 - 6) - 4(2 - 3) =$

A. -7

B. 7

C. -1

D. 1

Question 12

If $20 - \dfrac{4}{5}x \geq 16$, then

A. $X \leq 5$

B. $X \geq 5$

C. $X \geq 32\frac{1}{2}$

D. $X \leq 32\frac{1}{2}$

Question 13

If $x^2 - x - 6 = 0$ then x is

A. -2 or 3

B. -1 or 6

C. 1 or -6

D. 2 or -3

COLLEGE LEVEL MATH

Solve the following FIVE *problems and select your answer from the alternatives given.*
(Answers are on page 7)

Question 1

If $f(x) = x^4 - x + 2$, then $f(-x) =$

    A. $x^4 - x$

    B. $x^4 + x$

    C. $x^4 - x + 2$

    D. $x^4 + x + 2$

Question 2
The SINE of angle "B" is?

    A. $\dfrac{BC}{AC}$

    B. $\dfrac{AC}{AB}$

    C. $\dfrac{AB}{BC}$

    D. $\dfrac{AB}{AC}$

Question 3

Mary has 12 more apples than peaches. If she divides each fruit in half, she will have enough to give each of her 32 classmates a piece of fruit. How many peaches does Mary have?

    A. 2

    B. 3

    C. 12

    D. 8

Question 4

$x^2 + 2ix - 4 = 0$ has as its roots in

    A. $\sqrt{5} - 1, -\sqrt{5} - 1$

    B. $\sqrt{5} - i, \sqrt{5} + i$

    C. $\sqrt{3} - i, -\sqrt{5} + i$

    D. $\sqrt{3} - i, -\sqrt{3} - i$

Question 5

For what value of x is $x^2 - 3x - 18$ positive?

    A. $x < -3$ *or* $x > 6$

    B. $x > -3$ *and* $x < 6$

    C. $x > 6$ *and* $x > -3$

    D. $x > -3$

Question 6

If $f(x) = x^2 + 3x - 7$, then $f(-4) =$

    A. -35

    B. -11

    C. 21

    D. -3

Answers

MATH

ARITHMETIC

1: B	7: A
2: C	8: B
3: A	9: C
4: B	10: C
5: C	11: D
6: A	12: C

COLLEGE LEVEL MATH

1: D
2: B
3: A
4: D
5: B
6: D

ELEMENTARY ALGEBRA

1: A	8: B
2: C	9: B
3: A	10: D
4: D	11: B
5: D	12: A
6: C	13: A
7: D	