

Part I Elementary Algebra: Sample Test

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

A) 12

B) 4

C) 3

D) 2

2. $16X - 8 =$

A) $8x$

B) $8(2x-x)$

C) $8(2x-1)$

D) $8(2x-8)$

3. 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

4. Which of the following is not a factor of $2X^2 - 8X + 8$

A) 2

B) $2X-4$

C) $X-2$

D) $2X + 4$

Part II Arithmetic: Sample Test

Solve the following problems and choose your answer from the alternatives given. You may use the paper you have been given for your scratch work.

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

A) $0.20N$

B) $20N/100$

C) $1N/5$

D) $20N$

2. $7/20$

A) 0.035

B) 2.858

C) 0.35

D) 3.5

3. $7.86 \times 4.6 =$

A) 36.156

B) 36.216

C) 351.56

D) 361.56

4. Which of the following is the least?

A) 0.105

B) 0.501

C) 0.051

D) 0.15

5. The average weight for a group of 20 women is 130 pounds. If the average weight for $\frac{3}{4}$ of these women was 140 pounds, what was the average weight, in pounds, for the rest of the women?

A) 100

B) 110

C) 120

D) 135

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

A) 94

B) 104

C) 114

D) 124

7. Which of the following is closest to the square root of 10.5

A) 3

B) 4

C) 5

D) 8

8. The Number of Employees of Company K Who Were Involved in Accidents.

	Plant X	Plant Y
Mechanic	11	30
Power Machine Operators	9	12

The table above shows 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

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 $\frac{1}{2}$ of his time to the project and a second person for $\frac{1}{3}$ of her time, what part of the third worker's time should be budgeted to this project?

- A) $\frac{1}{3}$
- B) $\frac{1}{4}$
- C) $\frac{1}{6}$
- D) $\frac{1}{8}$

10. $2.75 + .003 + .158 =$

- A. 4.36
- B. 2.911
- C. 0.436
- D. 2.938

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

- A. 280
- B. 300
- C. 2,800
- D. 3,000

12. 32 is 40 percent of what number?

- A. 12.8
- B. 128

C. 80

D. 800

Part III Arithmetic: Sample Test

Solve the following problems and choose your answer from the alternatives given. Do not seek help as this text is intended to test your skills.

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- C) $1N/5$
- D) $20N$

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Part IV College-Level Mathematics: Sample Test

Solve the following problems and choose your answer from the alternatives given. You may use the paper you have been given for your scratch work.

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

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) $x^4 + x + 2$

2. The equation $x^2 + 2ix - 4 = 0$ has its roots

A) Square Root of $5 - i$, -Square Root of $5 - i$

B) Square Root of $5 - i$, Square Root of $5 + i$

C) Square Root of $3 - i$, -Square Root of $5 + i$

D) $-i + \text{Square Root of } 3$, $-1 - \text{Square Root of } 3$

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

4. The SINE of angle "B" is?



A) BC/AC

B) AC/AB

C) AB/BC

D) AB/AC