

DIAGNOSTICS TEST

Read Instructions Carefully:

- * Circle the letter alongside the correct answer for each question on the sheet.
 - * Only ONE answer is to be circled. If you wish to change your answer, put an "X" through the incorrect letter, and circle your new choice.
 - * Attempt all questions.
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Question 1 What is the value of: $-3 + 2 - 4$

- (A) +9 (B) -5 (C) 1 (D) -9

Question 2 If $x = 3$, $y = 1$, $w = 5$. What is the value of: $\frac{x - y}{w}$

- (A) $\frac{2}{5}$ (B) $\frac{3}{5}$ (C) $\frac{4}{5}$ (D) 1

Question 3 If $w = m + x$, which of the following is true?

- (A) $x = w - m$ (B) $x = m - w$ (C) $x = mw$ (D) $x = \frac{w}{m}$

Question 4 What is the value of: $\frac{2}{3} - \frac{3}{5}$

- (A) $-\frac{1}{8}$ (B) $-\frac{1}{2}$ (C) $\frac{1}{15}$ (D) $\frac{1}{2}$

Question 5 The expression $\frac{3a \times 2a}{a}$ is equal to:

- (A) $6a^2$ (B) $6a$ (C) $5a$ (D) 6

Question 6 $3x(x + 2)$ is equal to:

- (A) $10x$ (B) $3x^2 + 2$ (C) $4x^2 + 5x$ (D) $3x^2 + 6x$

MORE QUESTIONS ON BACK!

Question 7 What is the value of $1\frac{1}{2} \times 2\frac{1}{3}$

- (A) $2\frac{1}{6}$ (B) $2\frac{1}{5}$ (C) $3\frac{1}{6}$ (D) $3\frac{1}{2}$

Question 8 The expression $8 \div 4 + 6 \times 2$ is equal to:

- (A) $\frac{1}{2}$ (B) $1\frac{3}{5}$ (C) 14 (D) 16

Question 9 20% of \$250 is:

- (A) \$12.50 (B) \$25 (C) \$200 (D) \$50

Question 10 When \$320 is divided in the ratio 3:5 the two parts are:

- (A) \$128 : \$192 (B) \$120 : \$200 (C) \$96 : \$160 (D) \$80 : \$240

Question 11 The expression $x + 2x^2 - 3x + 4x^2$ can be simplified to:

- (A) $4x^6$ (B) $6x^2 + 4x$ (C) $6x^2 - 2x$ (D) $-4x^3$

Question 12 Which value for "x" solves the equation: $2 + 3x = x + 5$

- (A) $\frac{2}{3}$ (B) $\frac{2}{5}$ (C) $1\frac{1}{3}$ (D) $1\frac{1}{2}$

Question 13 What is the value of $3.012 + 4.87 + 2.359$

- (A) 4.523 (B) 4.740 (C) 5.523 (D) 5.631

Question 14 What is the value of 30.02×0.03

- (A) 0.09006 (B) 0.9006 (C) 9.006 (D) 90.06

Question 15 The expression $(x - y) - (2x - 3y)$ is equal to:

- (A) $x+y-2x+3y$ (B) $x+y-2x-3y$ (C) $x-y-2x-3y$ (D) $x-y-2x+3y$

Question 16 $(a+b)^2$ is the same as:

- (A) $a^2 + b^2$ (B) $2ab$ (C) $a^2 + b^2 + 2ab$ (D) a^2b^2

Question 17 $4x - x$ is the same as:

- (A) 4 (B) 3 (C) 0 (D) None of these

Question 18 $\frac{6a - 3}{6}$ is the same as:

- (A) $\frac{1}{2}$ (B) $a - 3$ (C) $a - \frac{1}{2}$ (D) $\frac{a}{2}$

Question 19 $7 - 3(x + 2)$ is the same as:

- (A) $4(x + 2)$ (B) $4x + 2$ (C) $1 - 3x$ (D) None of these

Question 20 $4 - \frac{1}{5}$ equals:

- (A) $3\frac{4}{5}$ (B) $\frac{3}{5}$ (C) $\frac{8}{5}$ (D) $3\frac{1}{5}$

Name: _____

Diagnostic Test - Answers

- ① B
- ② A
- ③ A
- ④ C
- ⑤ B
- ⑥ D

- ⑦ D
- ⑧ C
- ⑨ D
- ⑩ B
- ⑪ C
- ⑫ D
- ⑬ C
- ⑭ B
- ⑮ D

- ⑯ C
- ⑰ D
- ⑱ C
- ⑲ C
- ⑳ A

ANSWERS TO DIAGNOSTIC TEST

1	B	2	A	3	A	4	C	5	B	6	D
7	D	8	C	9	D	10	B	11	C	12	D
13	C	14	B	15	D	16	C	17	D	18	C
19	C	20	A								

- Updated Nov/11