



BASELINE ASSESSMENT

GRADE 9

Name: _____

Member ID: _____

Time: 90 Minutes

NO CALCULATOR.
USE YOUR BRAIN.

Calculate:

1) $2 + \underline{\hspace{2cm}} = 6$

7001

FOR
MARK

2) $3 + 5 = \underline{\hspace{2cm}}$

FOR
MARK

3) $16 + 8 = \underline{\hspace{2cm}}$

FOR
MARK

4) $27 + 18 = \underline{\hspace{2cm}}$

FOR
MARK

5) $9 - 4 = \underline{\hspace{2cm}}$

7002

FOR
MARK

6) $12 - 5 = \underline{\hspace{2cm}}$

FOR
MARK

7) $23 - 11 = \underline{\hspace{2cm}}$

FOR
MARK

8) $57 - 39 = \underline{\hspace{2cm}}$

FOR
MARK

9) $-1 + 6 = \underline{\hspace{2cm}}$

7003/4

FOR
MARK

10) $5 - 9 = \underline{\hspace{2cm}}$

FOR
MARK

Calculate without the use of a calculator:

11) $-5 \times 10 \times -3$

7005

FOR
MARK

12) $28 \div -7 = \underline{\hspace{2cm}}$

FOR
MARK

13) $4 \times 3 + 6 \times 5$

7006

FOR
MARK

14) $8 + 2 \times 9$

FOR
MARK

15) $-30 \div 10 \times 5 + 7$

7007

FOR
MARK

This test is mainly to identify the learner's problem areas. The final mark is only a rough estimation, as the weight of all the questions are 1 mark irrespective of number of steps.

99

99

16) $3 \times 2 \times (72 \div 9) - 13$

FOR
MARK

17) $\frac{2}{6}$ of $36 - 10$

7008

FOR
MARK

18) $4 \times 10 \div 5 \times (13 - 11)$

7009

FOR
MARK

19) $5000 \text{ ml} = \underline{\hspace{2cm}} \text{ l}$

7010

FOR
MARK

20) $6 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$

FOR
MARK

21) $6.52 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$

7011

FOR
MARK

22) $59 \text{ m} = \underline{\hspace{2cm}} \text{ km}$

FOR
MARK

Round off to the nearest 10:

23) $84 \approx \underline{\hspace{2cm}}$

7012

FOR
MARK

24) $167 \approx \underline{\hspace{2cm}}$

FOR
MARK

Round off to the nearest 100:

25) $2154 \approx \underline{\hspace{2cm}}$

FOR
MARK

26) $375 \approx \underline{\hspace{2cm}}$

FOR
MARK

Round off to the nearest 1000:

27) $6448 \approx \underline{\hspace{2cm}}$

FOR
MARK

28) $7835 \approx \underline{\hspace{2cm}}$

FOR
MARK

Round off to the nearest integer:

29) $1,49 \approx \underline{\hspace{2cm}}$

7013

FOR
MARK

30) $14,621 \approx \underline{\hspace{2cm}}$

FOR
MARK

Round off to 1 decimal place:

31) $12,53 \approx \underline{\hspace{2cm}}$

FOR
MARK
FOR
MARK

32) $67,397 \approx \underline{\hspace{2cm}}$

Round off to 2 decimal places:

33) $56,235 \approx \underline{\hspace{2cm}}$

FOR
MARK
FOR
MARK

34) $8,3662 \approx \underline{\hspace{2cm}}$

Determine the prime factors:

35) $81 =$

7014

FOR
MARK

36) $216 =$

FOR
MARK

Determine the factors:

37) $40 :$

7015

FOR
MARK

38) $36 :$

FOR
MARK

Determine the lowest common multiple:

39) 14 and $6:$

7016

FOR
MARK

40) 4 and 5 and $8:$

FOR
MARK

Determine the highest common factor:

41) 24 and $40:$

7017

FOR
MARK

42) 12 and 30 and $36:$

FOR
MARK

Find the equivalent fractions:

7019

43) $\frac{5}{7} = \frac{\hspace{1cm}}{21}$

FOR
MARK

44) $\frac{2}{9} = \frac{8}{\hspace{1cm}}$

FOR
MARK

Simplify:

45) $\frac{35}{77} =$

FOR
MARK

46) $\frac{24}{80} =$

FOR
MARK

Fill in $<$, $>$ or $=$

47) $\frac{3}{5} \frac{20}{25}$

FOR
MARK

48) $\frac{7}{9} \frac{3}{5}$

FOR
MARK

Write as mixed fraction:

7020

49) $\frac{11}{2} =$

FOR
MARK

50) $\frac{38}{5} =$

FOR
MARK

Write as improper fraction:

51) $8\frac{2}{3} =$

FOR
MARK

52) $3\frac{9}{11} =$

FOR
MARK

Calculate:

7021

53) $\frac{5}{7} + \frac{4}{7} =$

FOR
MARK

54) $\frac{1}{6} + \frac{4}{9}$

FOR
MARK

55) $1\frac{1}{3} + 2\frac{3}{4}$

7022

FOR
MARK

56) $\frac{2}{3} \times \frac{5}{8}$

7023

FOR
MARK

57) $\frac{7}{9}$ of 45

FOR
MARK

58) $\frac{5}{9} \div \frac{1}{4}$

FOR
MARK

59) $3\frac{3}{4} \div 2\frac{1}{16} \times 8\frac{1}{4}$

7024

FOR
MARK

Simplify:

8003

60) $2^3 - \sqrt{4} - \sqrt{9}$

FOR
MARK

61) $\sqrt{36 + 64}$

FOR
MARK

Simplify:

8004

62) $3a^5 \times 7a^3$

FOR
MARK

63) $5a^3bc^3 \times (-2ab^2c^2)$

FOR
MARK

Simplify:

8005

64) $\frac{x^7}{x^3} =$

FOR
MARK

65) $\frac{12d^8e^5}{4d^6e^2} =$

FOR
MARK

Simplify:

8006

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

FOR
MARK

67) $(-5b^3c)^2 =$

FOR
MARK

68) $\left(\frac{3w^2xz}{2y}\right)^3 =$

FOR
MARK

Write in expanded form: 8008

69) $5,38 \times 10^5$

FOR
MARK

Write in scientific notation:

70) 74 200 000

FOR
MARK

71) $3x - \frac{x^2}{3} - 7x^3 + 10$

8081

a) How many terms are in the expression?

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MARK

b) What is the variable?

8082

FOR
MARK

c) What is the constant term?

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d) What is the coefficient of x^3 ?

8083

FOR
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e) What is the degree of the expression?

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MARK

f) Rearrange the expression in descending powers of x .

8083

FOR
MARK

Simplify:

72) $5x + 2x$

8084

FOR
MARK

73) $x^2 + 4xy + 2x + 3x^2 + 2xy$

FOR
MARK

Simplify:

74) $6 \times a \times a \times a \times b \times b$

8085

FOR
MARK

75) $(6g^2h)(2gh^3)$

FOR
MARK

Simplify:

76) $3y \times 5 + 2y \times 4$

8086

FOR
MARK

77) $x \times 3 + x \times 5 - x \times 9$

FOR
MARK

Multiply out:

78) $3b(4a + 2b)$

8087

FOR
MARK

79) $-6x(8x - 3x^2)$

FOR
MARK

80) $3k(3 - k) + k(k + 2)$

8088

FOR
MARK

81) Subtract $3a^2 + 9a - 6$ from $4a^2 + 5a - 7$

8089

FOR
MARK

If $x = -3, y = 3, z = 4$ determine:

82) $12z - 20$

8090

FOR
MARK

83) $\frac{5y - 3}{3x + 5}$

FOR
MARK

Simplify:

84) $\frac{-6g^2h^5}{-3g^3h^4}$

8091

FOR
MARK

85) $\frac{4a - 4b}{4}$

8092

FOR
MARK

86) $\frac{20x + 10x}{5x}$

FOR
MARK

87) $(3x^2)^3 \times (x^4)^2$

8093

FOR
MARK

88) $\sqrt{36x^8y^{14}}$

8094

FOR
MARK

89) $\sqrt[3]{27g^{12}k^6}$

FOR
MARK

Solve the following equations:

90) $x + 4 = -7$

8026

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91) $x + 5 - 12 = 0$

FOR
MARK

92) $4x = -36$

8027

FOR
MARK

93) $\frac{x}{-6} = 12$

8028

FOR
MARK

94) $\frac{3x}{5} = 6$

8029

FOR
MARK

95) $\frac{5x}{3} - 12 = 8$

FOR
MARK

96) $3x + 7 = 5x - 9$

8030

FOR
MARK

97) $3x - 15 = -5x + 17$

FOR
MARK

98) $4 - 2(x + 2) = 10$

8031

FOR
MARK

99) $5(3x + 5) + 10 = -5(5 - x)$

FOR
MARK
