



BASELINE ASSESSMENT

GRADE 11

Name: _____

Member ID: _____

Time: 90 Minutes

NO CALCULATOR ALLOWED
FOR Q1-Q28. USE YOUR BRAIN.

Calculate:

1) $-1 + 6 =$ _____

7003/
7004

FOR
MARK

2) $5 - 9 =$ _____

FOR
MARK

3) $-7 - 2 =$ _____

FOR
MARK

4) $-5 \times 10 \times -3$

7005

FOR
MARK

5) $28 \div -7 =$ _____

FOR
MARK

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

7006

FOR
MARK

7) $8 + 2 \times 9$

7006

FOR
MARK

8) $-30 \div 10 \times 5 + 7$

7007

FOR
MARK

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

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.

72

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

7008

FOR
MARK

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

7009

FOR
MARK

Find the equivalent fractions:

7019

12) $\frac{5}{7} = \frac{\quad}{21}$

FOR
MARK

13) $\frac{2}{9} = \frac{8}{\quad}$

FOR
MARK

Simplify:

7019

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

FOR
MARK

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

FOR
MARK

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

7019

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

FOR
MARK

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

7019

FOR
MARK

Write as mixed fraction:

7020

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

FOR
MARK

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

FOR
MARK

Write as improper fraction:

7020

20) $8\frac{2}{3} =$

FOR
MARK

21) $3\frac{9}{11} =$

FOR
MARK

Calculate:

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

7021

FOR MARK

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

7021

FOR MARK

24) $1\frac{1}{3} + 2\frac{3}{4}$

7022

FOR MARK

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

7023

FOR MARK

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

7023

FOR MARK

27) $\frac{3}{8} \div \frac{1}{7}$

7023

FOR MARK

28) $2\frac{1}{4} \times 5\frac{5}{6} \div 1\frac{11}{24}$

7024

FOR MARK

29) $3x - \frac{x^2}{3} - 7x^3 + 10$

8081

a) How many terms are in the expression?

FOR MARK

8082

b) What is the variable?

FOR MARK

c) What is the constant term?

FOR MARK

8083

d) What is the coefficient of x^3 ?

FOR MARK

e) What is the degree of the expression?

FOR MARK

f) Rearrange the expression in descending powers of x .

8083

FOR MARK

Simplify:

30) $5x + 2x$

8084

FOR MARK

31) $3x^2 + 4xy + 2x + x^2 + 2xy$

8084

FOR MARK

Simplify:

32) $6 \times a \times a \times a \times b \times b$

8085

FOR MARK

33) $(6g^2h)(2gh^3)$

8085

FOR MARK

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

8089

FOR MARK

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

35) $12z - 20$

8090

FOR MARK

36) $\frac{5y - 3}{3x + 5}$ 8090

_____ FOR MARK

37) $(3x^2)^3 \times (x^4)^2$ 8093

_____ FOR MARK

38) $\sqrt{36x^8y^{14}}$ 8094

_____ FOR MARK

39) $\sqrt[3]{27g^{12}k^6}$ 8094

_____ FOR MARK

Simplify:

40) $-6x^3(x^4 - 2)$ 1001

_____ FOR MARK

41) $(2a - 4b) + 7(a - b)$ 1001

_____ FOR MARK

42) $(-2x - 2y)(5x + y)$ 1002

_____ FOR MARK

Factorise:

43) $4d^3g^8 - 12d^5g^4$ 1004

_____ FOR MARK

44) $x^2 - 64$ 1005

_____ FOR MARK

45) $y^3 + 125$ 1006

_____ FOR MARK

46) $x^2 + 10x + 21$ 1007

_____ FOR MARK

47) $x^2 + 2x - 24$ 1007

_____ FOR MARK

48) $6x^2 + 7x - 3$ 1008

_____ FOR MARK

49) $5(t + p) - k(t + p)$ 1009

_____ FOR MARK

50) $6x^2 + 2x - 3xy - y$ 1010

_____ FOR MARK

51) $xy + x^2 + 3x + 3y$ 1011

_____ FOR MARK

Simplify:

52) $\frac{9p^3}{q^3} \times \frac{q^3}{3p^2}$ 1017

_____ FOR MARK

53) $\frac{x^2 + 10x + 21}{3(x^2 - 9)} \div \frac{2x^2 + 14x}{30x^2 - 90x}$ 1017

_____ FOR MARK

54) $\frac{2}{x+5} + \frac{3}{x-3}$ 1018

FOR MARK

Simplify:

55) $\frac{x^2y^3 \times (x^3y^3)^2}{x^6y^3}$ 1023

FOR MARK

56) $\frac{x^2 \times x^{-4}}{x^{-7} \times x^3}$ 1023

FOR MARK

57) $x^{-2} \times \sqrt[3]{x^6}$ 1023

FOR MARK

58) $\frac{5^{x+1} + 5^{x+2}}{5^{x+1} + 5^x}$ 1024

FOR MARK

59) $\frac{25^{2n-4}}{5^{3n+1} \cdot 5^{2n-3} \cdot 5}$ 1025

FOR MARK

Solve the following equations:

60) $1 - 2x = 3 + 2(x + 2)$ 1027

FOR MARK

61) $\frac{5}{4} + \frac{2}{3x} = 4 - \frac{x+8}{12x}$ 1028

FOR MARK

62) $3^{4y-6} = 3^{-2}$ 1029

FOR MARK

63) $3.5^x = 375$ 1029

FOR MARK

64) $x^2 - 10x + 24 = 0$ 1030

FOR
MARK

Draw the number line for the following:

69) $x < 4 ; x \in \mathbb{R}$ 1037

FOR
MARK

Solve the simultaneous equations:

65) $2x + y = 7$
 $3x + 2y = 12$ 1031

FOR
MARK

70) $x \in (5 ; 9]$ 1037

FOR
MARK

Solve the following inequalities:

71) $5x + 1 \leq 6x - 2$ 1038

FOR
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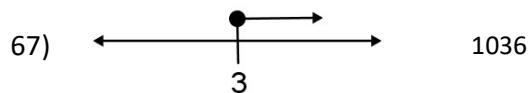
66) Make x the subject of the formula:
 $y = mx^2 + c$ 1033

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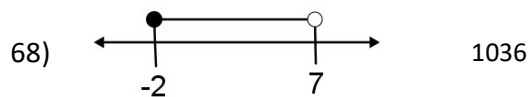
72) $-1 < 2x - 3 \leq 5$ 1038

FOR
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Write the interval or set-builder notation for the number lines:



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