

Master Coaching

Selective Schools

Mathematics Practice Test

MA-04

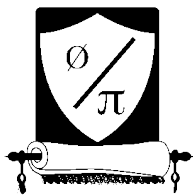
Note ... Correct Answers are provided on a single sheet (as page 6)

There is a blank Answer sheet supplied (as page 7)

There are 40 multiple-choice questions

Only choose one of the answers **a**, **b**, **c** or **d** at each question

The time allowed is **40 minutes**.



* circle the letter of the best answer to each question on your answer sheet.

1 $0.137 \div 100 =$ **a** 13.7 **b** 1.37 **c** 0.0137 **d** 0.00137

2 The answer to a question is $45 \cdot 25$. Which of the following was the question?

a $45 \cdot 25 \times 0$ **b** $45 \cdot 26 - 1$ **c** $46 \cdot 25 - 1$ **d** $22 \cdot 25 \times 2$

3 Which of these groups of numbers are all prime numbers?

- 1) 2, 3, 5, 7
- 2) 2, 11, 17, 21
- 3) 23, 29, 31, 34
- 4) 31, 47, 71

a group one only **b** groups one and two **c** groups one and four **d** group three only

4 750 kg out of one tonne, expressed as a decimal is **a** 7.5 **b** $.75$ **c** $.075$ **d** $.0075$

5 50% of \$50 + 20% of \$20 = **a** \$29 **b** \$7 **c** \$30 **d** \$35

6 A baby has been alive for 7200 seconds. Therefore, the baby has been alive for

a 2 days **b** 2 hours **c** 4 hours **d** 1 day

7 The difference in the value between the two fives in the number 25.50 is

a 1 **b** 4 **c** 4.5 **d** 0.5

8 The area of a triangle is 24 m^2 .

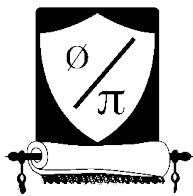
If the base of the triangle measures 8 m, what is the perpendicular height?

a 6 m **b** 3 m **c** 4 m **d** 8 m

9 A taxi costs \$5 to hire and then \$1.50 for every kilometre travelled. A group of people hire the taxi and at the end of the journey share the cost which totals \$50.

How many kilometres did the taxi travel? **a** 20 km **b** 40 km **c** 35 km **d** 30 km

10 What is the lowest common multiple of 2, 3 and 4? **a** 24 **b** 12 **c** 8 **d** 6



11 For the first two hours of a journey, a car travels at an average speed of 80 km per hour, and then travels at an average speed of 100 km per hour for three hours to complete the journey. What is the car's average speed for the total journey?

- a 90 km per hr b 85 km per hr c 97 km per hr d 92 km per hr

12 I am using a compass and draw a reflex angle of 270° .
How much further must I move the compass to complete a revolution?

- a 30° b one right angle c two right angles d 60°

13 I leave home at 7.00 am and arrive home at 22:30 on the same day.

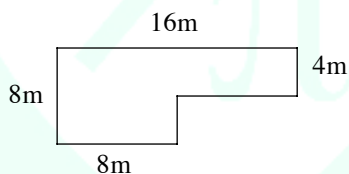
How long have I been away? a 15.5 hrs b 10.5 hrs c 14 hrs d 14.5 hrs

14 The value of $16 \div 4 \times 2 + 8 =$ a 10 b 40 c 16 d 20

15 As the sun set, I was walking with the sun to my immediate right.

What direction was I walking? a south b south-west c north d east

16 What is the perimeter of this shape?



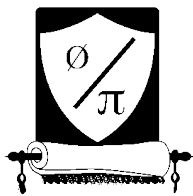
- a 56 m b 48 m
c 46 m d 52 m

17 What is the area of the shape in question 16? a 112 m^2 b 128 m^2
c 64 m^2 d 96 m^2

18 Which of these expressions is equal to $1\frac{3}{5}$? a 160% b 1.6
c 1.3 d both answers a and b

19 The fraction $\frac{5}{3}$ expressed as a decimal and rounded to two decimal places is
a 1.33 b 1.66 c 1.67 d 1.34

20 Two angles in a triangle are complementary. One of these angles measures 89° .
The third angle must be a 90° b obtuse c 91° d acute



21 From 50% of 76 subtract 0.5 of 56 a 20 b 10 c 35 d 10.5

22 I spend $\frac{1}{2}$ of my money in Target and $\frac{1}{3}$ of my money in Grace Bros.

If I started with \$60, how much do I have left? a \$10 b \$6 c \$5 d \$15

23 The sum of all prime numbers between 1 and 20 is a 75 b 58 c 66 d 77

24 What is the difference between the two 7's in the number 23.707

a 0.693 b 0.63 c 23.693 d 0.60

25 Six students compare their results in a maths test and find that their average mark was 85%. The test was out of 50. Three of the students scored 40 out of 50 and two of the students scored 45 out of 50.

What did the sixth student score? a 42 b 43 c 45 d 50

26 A field's area is 4.5 ha.

One side of the field measures 900m, so the measure of the other side is

a 500m b 50m c 45m d 4500m

27 In class 6M, 21 play netball while 18 play soccer.

If 12 students played both and there are 30 students in 6M,

how many students played neither sport? a 15 b 9 c 1 d 3

28 Farmer Courtney has an orchard containing 600 trees.

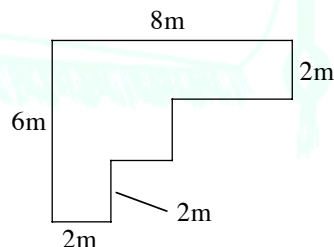
One third of the trees are peach, one fifth are nectarine and the remainder are plum.

How many plum trees are there? a 320 b 280 c 180 d 125

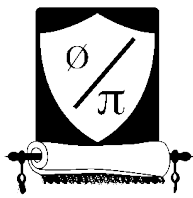
29 What is the perimeter of this shape?

The shape is drawn to scale.

a 26m b 20m c 24m d 28m



30 Which of these has the highest value? a $\frac{1}{3}$ b 34% c $\frac{2}{6}$ d 0.33



- 31 Which of the following descriptions fits a rectangular pyramid?
- a a shape that has 4 vertices and 8 edges b a shape that has 8 vertices and 4 edges
c a shape that has 5 vertices and 8 edges d a shape that has 3 faces and 5 edges

- 32 Jodie made a mistake and instead of multiplying by 8, she divided by 8.
The answer that she wrote was 72. What was the question?
- a 576×8 b $576 \div 8$ c 64×8 d 9×8

- 33 A ship sails for 32 nautical miles in a north-easterly (NE) direction from its home port.
A crewman is ill and the ship must return immediately to its home port.
What bearing must the navigator set to return home? a NW b SE c W d SW

- 34 $2 \times \frac{3}{11} =$ a $\frac{6}{22}$ b $2\frac{3}{11}$ c $\frac{6}{11}$ d $\frac{3}{22}$

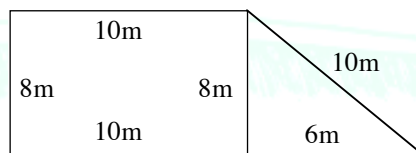
- 35 What is the lowest common multiple of 12 and 18? a 54 b 36 c 72 d 24

- 36 I leave home at 06:00 and return at 7:15pm on the same day.
How long have I been away? a 13 hrs 15 min b 12 hrs 15 min
c 13 hrs d 15 hrs 15 min

- 37 The value of $16 \div 4 \times 6 - 20 + 3 =$ a 1 b 7 c 16 d 0

- 38 20% of a number is 20. The number is a 400 b 40 c 100 d 1

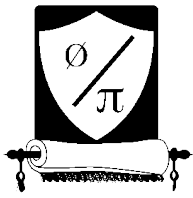
- 39 Calculate the area of this garden:



- a 104 square metres
b 52 square metres
c 140 square metres
d 128 square metres

- 40 Oranges, cut into quarters, are consumed by a junior soccer team at half time.
If the eight players each eat three pieces of orange, how many oranges were required?
- a 24 b 12 c 6 d 8

----- This is the End of Test MA-04 -----



- | | | | | | | | | | |
|-------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|-------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| 1 | a | b | <input checked="" type="radio"/> c | d | 21 | a | <input checked="" type="radio"/> b | c | d |
| 2 | <input checked="" type="radio"/> a | b | c | d | 22 | <input checked="" type="radio"/> a | b | c | d |
| 3 | a | <input checked="" type="radio"/> b | c | d | 23 | a | <input checked="" type="radio"/> b | c | d |
| 4 | a | b | <input checked="" type="radio"/> c | d | 24 | a | b | <input checked="" type="radio"/> c | d |
| 5 | <input checked="" type="radio"/> a | b | c | d | 25 | <input checked="" type="radio"/> a | b | c | d |
| ----- | | | | | ----- | | | | |
| 6 | a | b | c | <input checked="" type="radio"/> d | 26 | a | b | c | <input checked="" type="radio"/> d |
| 7 | a | b | c | <input checked="" type="radio"/> d | 27 | a | b | <input checked="" type="radio"/> c | d |
| 8 | a | <input checked="" type="radio"/> b | c | d | 28 | a | b | c | <input checked="" type="radio"/> d |
| 9 | a | b | c | <input checked="" type="radio"/> d | 29 | a | <input checked="" type="radio"/> b | c | d |
| 10 | a | b | c | <input checked="" type="radio"/> d | 30 | a | b | c | <input checked="" type="radio"/> d |
| ----- | | | | | ----- | | | | |
| 11 | a | <input checked="" type="radio"/> b | c | d | 31 | a | b | c | <input checked="" type="radio"/> d |
| 12 | a | b | <input checked="" type="radio"/> c | d | 32 | a | b | <input checked="" type="radio"/> c | d |
| 13 | a | b | c | <input checked="" type="radio"/> d | 33 | a | b | c | <input checked="" type="radio"/> d |
| 14 | <input checked="" type="radio"/> a | b | c | d | 34 | a | b | c | <input checked="" type="radio"/> d |
| 15 | a | b | <input checked="" type="radio"/> c | d | 35 | a | <input checked="" type="radio"/> b | c | d |
| ----- | | | | | ----- | | | | |
| 16 | a | <input checked="" type="radio"/> b | c | d | 36 | <input checked="" type="radio"/> a | b | c | d |
| 17 | a | b | <input checked="" type="radio"/> c | d | 37 | <input checked="" type="radio"/> a | b | c | d |
| 18 | <input checked="" type="radio"/> a | b | c | d | 38 | a | <input checked="" type="radio"/> b | c | d |
| 19 | a | b | <input checked="" type="radio"/> c | d | 39 | a | b | <input checked="" type="radio"/> c | d |
| 20 | a | b | c | <input checked="" type="radio"/> d | 40 | a | b | c | <input checked="" type="radio"/> d |

Date : _____

Name : _____

Score : _____

* Circle the letter of the best answer to each question ... for example 1 a b d

1 a b c d

21 a b c d

2 a b c d

22 a b c d

3 a b c d

23 a b c d

4 a b c d

24 a b c d

5 a b c d

25 a b c d

6 a b c d

26 a b c d

7 a b c d

27 a b c d

8 a b c d

28 a b c d

9 a b c d

29 a b c d

10 a b c d

30 a b c d

11 a b c d

31 a b c d

12 a b c d

32 a b c d

13 a b c d

33 a b c d

14 a b c d

34 a b c d

15 a b c d

35 a b c d

16 a b c d

36 a b c d

17 a b c d

37 a b c d

18 a b c d

38 a b c d

19 a b c d

39 a b c d

20 a b c d

40 a b c d