

Master Coaching

# Selective Schools

## Mathematics Practice Test

### MA-02

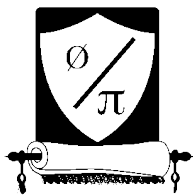
Note ... Correct Answers are provided on a single sheet (as page 6)

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 2000 m is one half of a 1 km b 4 km c 40 km d 5000 m

2  $0.3 \times 0.3$  a 0.9 b 0.6  
c 0.27 d 0.09

3 25% of \$800 a \$200 b \$400 c \$500 d \$100

4 75% of children were present at school on Friday.  
The enrolment in the school is 400 children.  
How many were absent on that Friday? a 300 b 200 c 100 d 75

5 Which of these groups of angles could be the angles of a triangle?  
a  $60^\circ, 60^\circ, 100^\circ$  b  $90^\circ, 30^\circ, 70^\circ$   
c  $120^\circ, 40^\circ, 20^\circ$  d  $90^\circ, 180^\circ, 90^\circ$

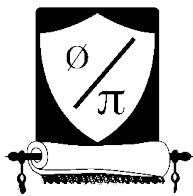
6 In a complete revolution there are a  $360^\circ$  b  $270^\circ$  c  $180^\circ$  d  $320^\circ$

7 My watch is faulty and gains 3 mins every half hour. I now set my watch to the correct time of 6:30 pm. What will the correct time be when the watch shows 7:36 pm on the same day?  
a 6:33 pm b 7:30 pm c 7:42 pm d 7:24 pm

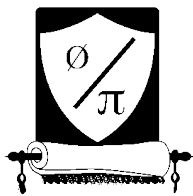
8 If 1kg of flour costs \$2.20, so how much will two and a half kilograms cost?  
a \$4.40 b \$4.70 c \$6 d \$5.50

9 An amount of money is divided equally amongst a group of 12 people and each receives \$12.50. How much will each person receive if 3 extra people join the group and share the same amount of money?  
a \$10 b \$8.50 c \$12 d \$15.50

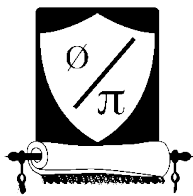
10 A cyclist averaged 150 km of cycling per day during a ten day training camp.  
What was the total distance covered by the cyclist during the whole camp?  
a 15 km b 1500 km c 150000m d 15000 km



- 11 The area of a square field is  $6400\text{ m}^2$ . What is the measurement of each side?  
a 3200 m    b 800 m    c 80 m    d 1600 m
- 12 The volume of a container is  $72\text{ cm}^3$ . The length and width are each 3cm.  
What is the height?    a 8 cm    b 3 cm    c 9 cm    d 12 cm
- 13 A boy's stride measures 80cm.  
How many equal strides would the boy take to walk 1km?  
a 125    b 250    c 800    d 1250
- 14  $12 \times 2 - 16 \div 4 =$     a 4    b 8    c 16    d 20
- 15  $4^2 \times 2^2 =$     a 8    b 36    c 64    d 48
- 16 If I double the product of the two prime numbers between 6 and 12, my answers would be  
a 72    b 154    c 144    d 77
- 17 Michael, Yusef, Igor and Jakob have an average age of 14 years. Michael and Yusef are both 12 years old, and Igor and Jakob are the same age as each other.  
How old are Igor and Jakob?    a 16 years    b 10 years    c 14 years    d 8 years
- 18 A woman whose age is now 32 years was 26 years old when her daughter was born.  
How old will the daughter be in 6 years time?  
a 6 years old    b 10 years old  
c 38 years old    d 12 years old
- 19 If I leave home at midday and arrive home at 23:20, how long have I been away from home?  
a 11 hours 20 min    b 12 hours 20 min  
c 23 hours 20 min    d 11 hours
- 20 This number sentence is false :  $3^4 > 10^2$  What is the lowest number to which I can change the power sign next to the '3' to make it true?  
a 6    b 5    c 2    d 3

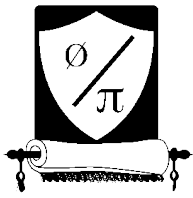


- 21  $3\frac{3}{4}$  kg equals    a 3000 g    b 375 g    c 350 g    d 3750 g
- 22 What is the difference between the value of the first and second 4 in the number 42.45?  
a 39.6    b 40    c 4    d 41.6
- 23 In an examination, I scored 40 out of 50. As a percentage, this could be expressed as  
a 40%    b 50%    c 80%    d 4%
- 24 A clock is not working properly. It loses 6 mins every hour.  
In a quarter of an hour, it loses    a 1 min    b 90 secs    c 110 secs    d 2 min 30 secs
- 25 In an equilateral triangle, the sum of the angles always equals  
a  $360^\circ$     b  $90^\circ$     c  $180^\circ$     d  $200^\circ$
- 26 A reflex angle measures  $270^\circ$ . To complete a revolution, there needs to be another  
a  $30^\circ$     b  $100^\circ$     c  $130^\circ$     d  $90^\circ$
- 27 A square pyramid has    a one vertex    b five faces  
c four edges    d four faces
- 28 When a weather change arrives at 3 pm, the temperature drops in the next half an hour by one quarter from its maximum. It is now 3:30 pm and the temperature is  $30^\circ$ .  
What was the maximum temperature?    a  $40^\circ$     b  $35^\circ$     c  $37.5^\circ$     d  $32^\circ$
- 29 A boy saved \$96 in one year. He saved the same amount each month.  
How much did he save in four months?    a \$40    b \$56    c \$32    d \$8
- 30 I purchase three chairs for \$22.50. How many chairs can I purchase for \$112.50?  
a 10    b 12    c 20    d 15

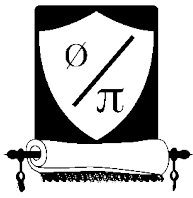


- 31 I have read 75% of a book.  
If I have 50 pages left to complete reading the book, how many pages have I already read?  
a 100    b 200    c 150    d 50
- 32 I have to fill ten half-kilogram bags of flour. How much flour will I need?  
a 4 kg    b 5 000 g    c 10 000 g    d 500 g
- 33 Which of the following represents the smallest value?  
a 20%    b 0.4    c 0.04    d 3%
- 34  $6 + 3 \times 4 \times 2 =$     a 30    b 72    c 40    d 36
- 35 The area of a rectangular field is 40 000 square metres.  
If two sides each measure 500 m, what is the measurement of the other two sides?  
a 500 m    b 80 m    c 800 m    d 100 m
- 36 The volume of a container is  $48 \text{ cm}^3$ . The container is 3 cm long and 2 cm wide.  
What is the height of the container?    a 8 cm    b 6 cm    c 10 cm    d 3 cm
- 37 I doubled the product of 10 and 2 and subtracted the quotient of 12 and 4.  
My answer is    a 20    b 17    c 78    d 37
- 38 Which of these numbers is not a composite number?    a 22    b 33    c 17    d 4
- 39 After batting four times during the cricket season, a batsman had an average of 32.  
Which set of scores represents his exact scores in those four innings?  
a 32, 64, 32, 50    b 100, 20, 0, 8  
c 50, 50, 20, 10    d 32, 100, 10, 4
- 40 I leave home at 7:15 and arrive back seven and a half hours later.  
What is the time when I return?    a 14:15    b 14:30    c 15:45    d 14:45

----- This is the End of Test MA-02 -----



- |       |     |     |     |     |    |     |     |     |     |
|-------|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 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   |



Date : \_\_\_\_\_

Name : \_\_\_\_\_

Score : \_\_\_\_\_

# Master Coaching

\* 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