

Master Coaching

# Selective Schools

## Mathematics Practice Test

### MA-03

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

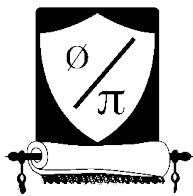
There is a blank Answer sheet supplied (as page 7)

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**.





- 11 If a car travels at an average speed of 60 km per hour, what is its average speed per minute?  
a 30 km/min    b 1 km/min    c 6 km/min    d 120 km/min

- 12 Kylie was given \$30 pocket money for a week. She spent \$6 on the first day.  
What fraction of her money does she have left?

a  $\frac{3}{5}$     b  $\frac{3}{4}$     c  $\frac{4}{5}$     d  $\frac{5}{6}$

- 13 At a city parking station, the parking fee is \$11 per hour ( or part of an hour ). If I parked my car at 9:04 and left the parking station at 13:05, how much would I have to pay?

a \$55    b \$44    c \$56    d \$60

- 14  $43 \times 7 - 41 \times 7 =$     a  $> 40$     b  $< 14$     c 26    d  $7 \times (43 - 41)$

- 15 Which one of these has a value between  $\frac{3}{4}$  and  $\frac{5}{6}$ ?    a  $\frac{17}{24}$     b  $\frac{19}{24}$     c  $\frac{21}{24}$     d  $\frac{22}{24}$

- 16  $3^3 \times 2^4 =$     a 72    b 432    c 216    d 144

- 17 This number sentence is false :  $6 \times 3 - 2 > 4 + 4 + 4 + 4$

Below are four ways in which the number sentence could be rewritten to make it true?

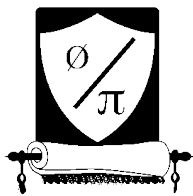
Which way is correct?    a  $6 \times 3 - 2 = 4 \times 4$     b  $6 - 3 \times 2 > 4 + 4 + 4 + 4$

c  $6 \times 3 + 2 > 4 + 4 + 4 + 4$     d both answers a and c

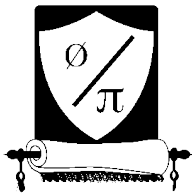
- 18 I am in a group having a meal in a restaurant and we decide to share the bill of \$360.  
I offer to pay for two others as well as myself. The offer is accepted and I pay \$180.  
How many people were in the group?    a 2    b 4    c 8    d 6

- 19 Two large glasses together contain 560 ml of water.  
The first glass contains 160 ml more than the second glass.  
How much water is in the first glass?    a 360mL    b 200mL    c 280mL    d 400mL

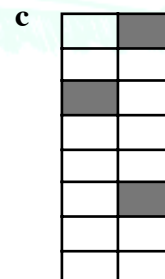
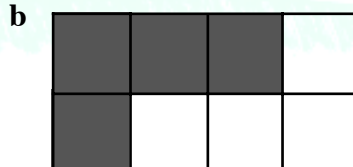
- 20 If I double the quotient of 12 and 6, what is my answer?    a 144    b 36    c 4    d 8



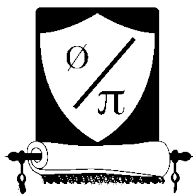
- 21  $23.65 \times 10 =$     **a** 2.365    **b** 236.5    **c** 0.2365    **d** 2365
- 22 45% has the same value as    **a** 0.045    **b** 0.45    **c**  $\frac{9}{20}$     **d** answers b and c
- 23 In a stationery shop, there are four ways to purchase pens.  
Which is the way that allows customers to purchase pens at the cheapest rate per pen?
- a** \$5 for ten pens    **b** half a dozen pens for \$3.80  
**c** 80c per single pen    **d** \$2.80 for four pens
- 24 The difference in the value of the two nines in 9009 is  
**a** 90    **b** 8990    **c** 8991    **d** 100
- 25 75 kg out of one tonne, expressed as a decimal is  
**a** 0.075    **b** 0.75    **c** 7.5    **d** 0.70
- 26 A salesman leaves his workplace and travels 10 km due south, then 32 km due east and finally, 10 km due north. How far is he from his workplace?  
**a** 10 km    **b** 20 km    **c** 32 km    **d** 42 km
- 27 What is the product of the prime numbers between 12 and 20?  
**a** 2197    **b** 4199    **c** 49    **d** 221
- 28 Which of these number sentences equals 10?    **a**  $10 + 10 \times 10$     **b**  $100 - 10 \times 10$   
**c**  $(10 \times 10) - (8 \times 10)$     **d**  $36 \div 9 + 48 \div 8$
- 29 A right angled triangle has sides of 8cm, 15cm and 17 cm.  
Its area must be    **a** 120 sq.cm    **b** 40 sq.cm    **c** 80 sq.cm    **d** 60 sq.cm
- 30 A woman spent 75% of her money in one shop. She has \$100 left.  
How much did she start with?    **a** \$75    **b** \$300    **c** \$400    **d** \$100



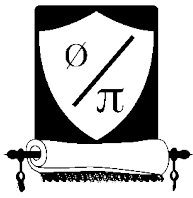
- 31 If a car travels at an average speed of 100 km per hour, how far would it travel in 15 mins?  
a 115 km    b 25 km    c 50 km    d 20 km
- 32 I leave home at 6:10 am and return home at 8:05 pm, I have been away from home for :  
a 13 hours 55 mins    b 14 hours    c 14 hours 5 mins    d 8 hours 5 mins
- 33 If I correctly subtract the sum of 5 and 3 from the product of 5 and 3, my answer is  
a 7    b 10    c zero    d 12
- 34 Which of the following descriptions apply to both a square and a parallelogram?  
a the shapes have two diagonals    b all sides must be equal  
c the shapes have four vertices    d both answers a and c
- 35 How far from completing a revolution am I if I have moved a compass through  $230^\circ$ ?  
a  $70^\circ$     b  $130^\circ$     c  $50^\circ$     d  $100^\circ$
- 36 For how long will 2 tonnes 100kg of firewood last if 30 kg of wood are used each day?  
a 70 days    b 30 days    c 700 days    d 65 days
- 37  $\frac{1}{4}$  of one hectare equals    a 250 sq.m    b 4000 sq.m    c 2500 sq.m    d 25 sq.m
- 38  $0.2 \times 0.02 =$     a 0.0004    b 0.004    c 0.04    d 0.4
- 39 The quotient of two numbers is the same as their product ... what are the two numbers?  
a 2 and 12    b 2 and 2    c 1 and 1    d 10 and 10
- 40 Which rectangle has a shaded area that is equal to  $\frac{3}{8}$  of its total area?



----- This is the End of Test MA-03 -----



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