

Master Coaching

Selective Schools

Mathematics Practice Test

MA-05

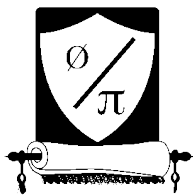
Note ... Correct Answers are provided on a single sheet (as page 6)

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 $0.0235 \div 1000 =$ a 235 b 0.000235 c 0.0000235 d 23.50

2 I have a large yard in which $\frac{7}{12}$ is lawn and $\frac{1}{3}$ is garden. So how much is path?

a $\frac{1}{3}$ b $\frac{1}{12}$ c $\frac{1}{4}$ d $\frac{8}{15}$

3 Add 25% of 60 to 0.25 of 60 a 50 b 40 c 30 d 35

4 What is the missing number in this number sentence? $\square + 3 \times 10 - 10 = 26$

a 6 b 0 c 4 d 10

5 The area of a triangle is 36 cm^2 . The perpendicular height is 4cm.

How long is the base? a 9 cm b 12 cm c 10 cm d 18 cm

6 The area of a square field is one hectare.

What is the measurement of the sides? a 10m b 1000m c 100m d 50m

7 The base of a large storage container measures 5m long and 4m wide.

If the container's capacity is 200 m^3 , how high is the container?

a 5m b 10m c 20m d 100m

8 Two angles of a triangle are each exactly a half of the third angle.

What is the measurement of each of the two smaller angles?

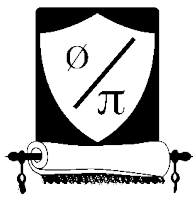
a 90° b 45° c 30° d 60°

9 For the first six hours of a long journey, a car averages 85km/hr and then averages 105 km/hr for four hours to complete the journey.

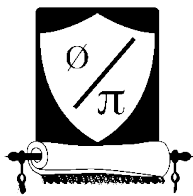
What is its average speed for the whole journey? a 93 km/hr b 95 km/hr
c 93.5 km/hr d 100 km/hr

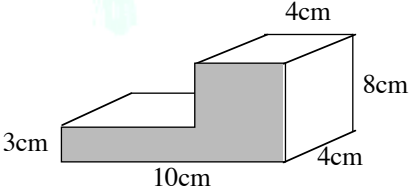
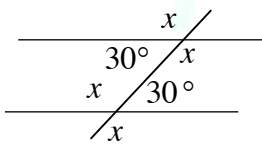
10 The parking in a car park is free for the first two hours and then \$12 per hour or part of an hour. I park my car at 11:35 am and leave the car park at 17:39.

What parking fee do I have to pay? a \$48 b \$72 c \$54 d \$60

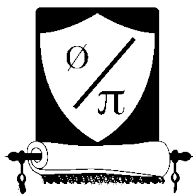


- 21 What is the lowest common multiple of 3, 4 and 6? **a** 6 **b** 24 **c** 12 **d** 72
- 22 The capacity of a big container is 343 cubic metres.
Which of these might represent its measurements?
a a 7m cubic container **b** 7m long, 7m wide, 6m high
c 8m long, 6m wide, 7m high **d** both answers a and b
- 23 In a weekly English test, I scored 13 out of 20.
What is this score expressed as a percentage? **a** 55% **b** 65% **c** 60% **d** 75%
- 24 What is the difference in value between the two sixes in the number 6.006?
a 5.9 **b** 0.001 **c** 5.994 **d** 5.949
- 25 What is the next number in this series? $\frac{1}{10}$, 0.2, $\frac{3}{10}$, $\frac{2}{5}$,
- a** $\frac{1}{2}$ **b** $\frac{6}{10}$ **c** 0.45 **d** 0.05
- 26 I must draw a pie graph to show the results of the class survey on favourite ice cream flavours. There are 24 students in the class.
The results were : Chocolate - 8 Strawberry - 5 Vanilla - 4 Caramel - 4 Banana - 3
What would be the approximate angle for the sector showing the result for 'Caramel'?
a 80° **b** 50° **c** 75° **d** 60°
- 27 It is the year 2000. In five years time, I will be double my age at my 21st birthday.
In what year was my 25th birthday? **a** 1990 **b** 1995 **c** 1985 **d** 1988
- 28 At its first stop after school, 16 students get off our school bus. This left $\frac{3}{4}$ of the original students still on the bus.
At the next stop one third of the remaining students got off the bus.
How many students are now on the bus? **a** 40 **b** 32 **c** 25 **d** 36
- 29 The hour hand of a wall clock has moved through 390° since midnight Sunday.
It is now Monday. What is the time? **a** 19:00 **b** 19:50 **c** 12:00 **d** 13:00
- 30 Which of these number sentences equals 66? **a** $3 \times 4 \times 5 + 6$ **b** $(3 \times 4) \times 5 + 6$
c $3 \times 4 \times (5 + 6)$ **d** both answers a and b

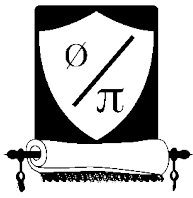


- 31 I purchased a house for \$200 000 and sold it twelve months later for a profit of 5%.
What was the selling price? a \$205 000 b \$210 000 c \$215 000 d \$225 000
- 32 During the first three months of the year I saved a total of \$150. After the next two months, I had doubled my savings. In the sixth month of the year I saved \$60.
What was my average saving per month for the six months?
a \$52 b \$50 c \$60 d \$65
- 33 A farmer needs to re-fence a large field that is 500 m long and 300 m wide.
The fence has 3 gates, each measuring 4.75 m. The gates do not need replacing.
What is the total length of fencing that the farmer will need to purchase?
a 1581 m b 1614.25 m c 1619 m d 1585.75 m
- 34 The circumference of a circle measures 9.42 cm. What is the diameter?
a 3 cm b 10 cm c 4 cm d 3.5 cm
- 35 In Year 8, for Maths, $\frac{1}{4}$ of the students do Advanced and $\frac{7}{12}$ do Intermediate.
The rest do General. There are 144 students in Year 8. How many study General Maths?
a 12 b 6 c 24 d 20
- 36 On a scale drawing, 5cm represents 250m.
The scale is a 1: 25 b 1: 5000 c 1: 50 d 1: 250
- 37 8 men complete a job in 20 days. How long will it take 5 men to complete the same job?
a 40 days b 36 days c 32 days d 25 days
- 38 A truck driver leaves his home town base for an interstate trip at 22:30 on Monday.
He drives for ten hours, stopping once for a 45 minute break.
At what time on Tuesday does he arrive at his destination?
a 9:15 am b 9:15 pm c 9:45 am d 8:15 am
- 39 What is the volume of this shape?
- 
- a 320cm^3
b 220cm^3
c 200cm^3
d 180cm^3
- 40 In the diagram x equals
- 
- a 30° b 120°
c 130° d 150°

----- This is the End of Test MA-05 -----



- | | | | | | | | | | |
|-------|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| 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) | 30 | 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