

MASTER COACHING

NAME:

G & T MATHS & G.A. 5

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Edition 1



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Lesson 01

Date:

1 Algorithms

- a** Half of four fifths **b** $49 - 9 \times 3 + 2$ **c** $28 - 10 + 8$ **d** $(909)^2$ **e** $79032 \div 8$
f $10743 \div 7$ **g** $201903 \div 37$ **h** 20% of $\frac{3}{8}$ **i** 4% of \$212 **j** $20 - 1 \cdot 64$

2 Maths dash

- a** $132/12 =$ **b** $67 - 23 = \dots\dots$ **c** Pentagon =sides **d** $6^2 =$
e $128dg = \dots\dots mg$ **f** $8^2 - 5^2 =$ **g** $\$18 \cdot 65 + \$13 \cdot 75 =$ **h** L = 8m, W = 0.5m Area = ...
i $13/50 = \dots\%$ **j** 180min =hours **k** $200\% - 1 \cdot 5$
l $\$25 \cdot 20 - \$16 \cdot 40 =$ **m** 2km = ...Hm **n** $30\% = \dots/50$ **o** $2 - 5 =$
p $40 \times 15c = \$\dots$ **q** $5 - 12 =$ **r** $\frac{2}{3}$ of circle =degrees
s $\frac{3}{4} - \frac{3}{8} =$ **t** $200m \times 150m = \dots\dots ha$ **u** $16 - 1 \cdot 4 =$ **v** $1000 - 9 \cdot 60 =$
w $0 \cdot 4 \times 80\% =$ (answer as a decimal) **x** 1800cc =L **y** 0.6 of \$3 = ...
z $40\% - \frac{2}{5} =$ **aa** $18/30 = \dots\dots\%$ **ab** $\frac{3}{7}$ of 3 weeks = **ac** $(10\%)^2 = \dots\dots\%$
ad $4 \cdot 2L = \dots\dots cc$ **ae** 4 cubed **af** $\sqrt{49}$

Multiple Choice - which answer is correct?

- 3** The sum of two prime numbers is 28 and their difference is 6. What are the numbers?
a 12, 16 **b** 19, 9 **c** 11, 17 **d** 13, 15
4 A man charged \$250 to tile a rectangular floor. At the same rate, how much would he charge to tile a rectangular floor that is twice as long and twice as wide?
a \$250 **b** \$500 **c** \$750 **d** \$1000
5 Farmer Brown has some animals. One fifth are pigs, one tenth are horses and half are cows. The rest are goats. He has 10 goats. How many animals does he have altogether?
a 20 **b** 40 **c** 50 **d** 100
6 $7 + \frac{1}{100} + \frac{3}{1000}$ equals : **a** 7.13 **b** 7.103 **c** 7.130 **d** 7.013
7 $\frac{1}{7} \times \frac{3}{8}$ equals : **a** $\frac{3}{15}$ **b** $\frac{21}{56}$ **c** $\frac{4}{15}$ **d** $\frac{3}{56}$
8 If you are facing due west, what direction is on your right
a North **b** South **c** East **d** West

9 Brain Strainers

Peter agreed to work after school for 8 weeks at a fixed weekly rate. But instead of being given only money, he was to be given \$85 and a bicycle. However, Peter worked only 5 weeks at the fixed weekly rate and was given \$25 and the bicycle. How much was the bicycle worth?

Lesson 05

Date:

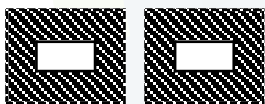
Brain Strainers

- A 'palindromic' number reads the same forwards as backwards (such as 343).
A driver noticed that his car had completed 15 951 kilometres.
Two hours later he was amazed to see the number on the odometer was again palindromic.
How fast was he driving?
- Eight people want to play a 48-minute game as a team but only a team of exactly five is allowed to play. During the game a player may be replaced by someone else.
If each of the eight people plays for the same amount of time, how many minutes will each of the eight people play?
- My watch loses 4 minutes every hour. It was correct at 8:30 this morning.
At what actual time will it show noon? When it shows noon, what is the actual time?
- $$\begin{array}{r} 111 \\ 333 \\ 555 \\ 777 \\ 999 \end{array} +$$
 There are many variations of the puzzle on the left :
In the addition sum

 - replace 12 numbers with zeros so that the sum comes to 20;
 - replace 10 numbers with zeros to make the sum come to 1111;
 - now replace only 9 numbers with zeros to get 1111 again.

Multiple Choice - which answer is correct?

- What is $\frac{13}{20}$ expressed as a decimal? **a** 1.3 **b** 0.13 **c** 2.6 **d** 0.65
- A half of a third equals : **a** $\frac{1}{6}$ **b** $\frac{2}{3}$ **c** $1\frac{1}{2}$ **d** 6
- A scale of 1 cm represents 50 metres. How many metres are represented by 8.5 cm?
a 85 metres **b** 405 metres **c** 425 metres **d** 850 metres
- A fraction between $\frac{1}{2}$ and $\frac{2}{3}$ is : **a** $\frac{5}{6}$ **b** $\frac{3}{5}$ **c** $\frac{5}{12}$ **d** $\frac{3}{4}$
- Matt makes two identical cardboard squares with slits as shown below :



He rotates the second through 90°. He then places one on top of the other without changing the direction of the slits.
What is the shape of the opening?



- Two dolphins were swimming. The first dolphin swam half an hour at a certain speed.
The second dolphin swam 1 hour at half the speed of the first dolphin.
The first dolphin swam : **a** half as far as the second dolphin
b twice as far as the second dolphin
c four times as far as the second dolphin
d the same distance as the second dolphin
- Write the numeral for $7 \times 10^3 + 3 \times 10^2 + 5$: **a** 735 **b** 7035 **c** 7350 **d** 7305
- 3% of 234 equals : **a** 6.92 **b** 7.02 **c** 70.2 **d** 78

Master Coaching Pledge

Master Coaching Keys to Learning:

The following charter has been produced to prepare you the pursuit of excellence that leads to a life-time of rewards and fulfillment. This is a partnership agreement that allows both parties to mutually benefit from your time at Master Coaching

At the coaching session:

1. Smile, relax, you are focused and in control
2. Concentrate, visualize, execute: claim the reward
3. Assume success. Our members should approach each test in life enthusiastically; every challenge presents an opportunity to demonstrate your prowess. Relish but don't underestimate the magnitude of the test, instead focus your thoughts towards a positive outcome, a chance to excel; a time to enjoy your moment in the sun.

Master Coaching Pledge

Master Coaching Pledge

- that your welfare is the paramount consideration in everything that we do
- to be diligent in our preparations which directs our actions in support of you
- show care and give encouragement to you in your striving for excellence
- to personalise all our efforts to your specific needs in all areas
- to encourage you to dare to dream, and to expect that dreams do come true

Christian Avent

CHRISTIAN AVENT

B.Ed. NCAS Principal

My Commitment to Master Coaching

- to be honest in all my dealings and
- to accept their accolades and focus my efforts on achieving the zenith in all my endeavours
- to appreciate my cohorts and support them in any way possible
- to live the dream, strive for excellence in everything that I do
- visualise my ultimate success

Robert A Ollis

ROBERT A. OLLIS

B.Sc., Dip.Ed., M.Sc.
Founder, Master Coaching

Your complete satisfaction is the focus of everything we do.