DECIMALS

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Edition 1

MC
MASTER COACHING
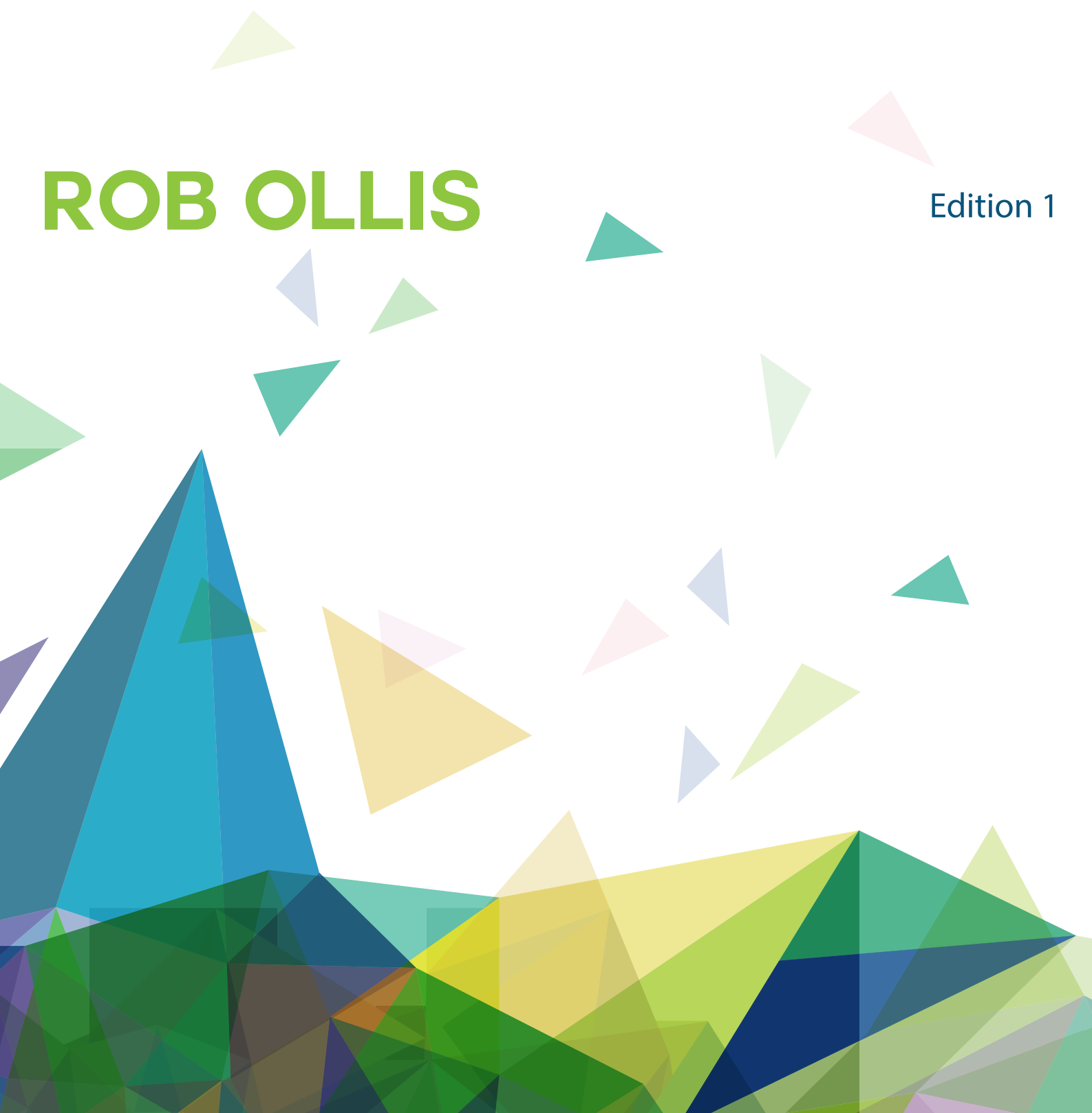
Study 1. Set One

1)   Write the following decimals as fractions.

a) 0.3	g) 1.9	m) 2.091	s) 12.051
b) 0.7	h) 1.07	n) 2.91	t) 67.03
c) 0.03	i) 2.99	o) 7.009	u) 98.071
d) 0.09	j) 2.09	p) 4.077	v) 109.99
e) 0.11	k) 2.009	q) 6.77	w) 10.999
f) 0.79	l) 6.051	r) 9.0019	x) 72.073

2)   Simplify the following fractions.

a) $\dfrac{2}{10}$	f) $\dfrac{25}{100}$	k) $2\dfrac{6}{10}$	p) $8\dfrac{75}{100}$
b) $\dfrac{2}{100}$	g) $\dfrac{40}{100}$	l) $1\dfrac{65}{100}$	q) $9\dfrac{30}{1000}$
c) $\dfrac{5}{10}$	h) $\dfrac{35}{100}$	m) $5\dfrac{12}{100}$	r) $11\dfrac{48}{100}$
d) $\dfrac{5}{1000}$	i) $\dfrac{15}{100}$	n) $7\dfrac{80}{100}$	s) $10\dfrac{85}{100}$
e) $\dfrac{8}{10}$	j) $\dfrac{24}{1000}$	o) $4\dfrac{5}{1000}$	t) $7\dfrac{36}{100}$

3)   Write these decimals as fractions with denominator of 10, 100 or 1000. Then simplify the fractions where possible.

a) 0.7	e) 0.04	i) 0.003	o) 0.06
b) 0.9	f) 0.08	j) 0.008	p) 0.6
c) 0.6	g) 0.07	k) 0.019	q) 0.004
d) 0.5	h) 0.05	l) 0.034	r) 0.7

Decimals Multiplication, Addition and Subtraction

1   **a** $0 \cdot 6 \times 0 \cdot 4$ **b** $0 \cdot 6 \times 40$ **c** $0 \cdot 06 \times 0 \cdot 04$ **d** $60 \times 0 \cdot 04$

     e $0 \cdot 003 \times 8$ **f** $1 \cdot 44 \times 0 \cdot 1 \times 0 \cdot 02$ **g** $1 \cdot 02 \times 2 \cdot 04$ **h** $2 \cdot 4 \times 0 \cdot 06$

     i $600 \times 0 \cdot 082$ **j** $100 \times 0 \cdot 074 \times 2 \cdot 03$ **k** $(0 \cdot 3)^2$ **l** $(0 \cdot 02)^3$

     m $2 \cdot 6 \times 0 \cdot 07$ **n** $500 \times 0 \cdot 04 \times 0 \cdot 3$ **o** $0 \cdot 08 \times 0 \cdot 6$ **p** $800 \times 0 \cdot 06$

     q $1 \cdot 06 \times 60$ **r** $3 \cdot 142 \times 1 \cdot 02$ **s** $0 \cdot 32 \times 8 \times 0 \cdot 5$ **t** $(1 \cdot 2)^3$

2   **a** $0 \cdot 6 + 0 \cdot 4$ **b** $70 + 0 \cdot 36$

     c $3 \cdot 8 + 5 + 0 \cdot 42$ **d** $12 + 1 \cdot 3$

     e $0 \cdot 16 + 8 \cdot 6 + 3$ **f** $74 \cdot 3 + 0 \cdot 692 + 5 + 1 \cdot 4$

     g $36 \cdot 5 - 12 \cdot 3$ **h** $607 \cdot 4 - 231 \cdot 7$

     i $86 \cdot 4 - 1 \cdot 76$ **j** $20 \cdot 3 - 2 \cdot 74$

     k $9 \cdot 74 - 1 \cdot 82$ **l** $3 \cdot 84 - 0 \cdot 064$

     m $6 \cdot 4 + 30 \cdot 8 + 6$ **n** $23 + 1 \cdot 427 + 30 \cdot 7$

     o $6 \cdot 04 + 1 \cdot 03 + 0 \cdot 0082$ **p** $1 \cdot 094 - 0 \cdot 063$

     q $23 - 2 \cdot 16$ **r** $1 \cdot 2 + 0 \cdot 4 \times 0 \cdot 2$

     s $3 \cdot 02 + 7 + 1 \cdot 08$ **t** $6 \cdot 03 + 0 \cdot 3 \times 40 + 0 \cdot 08$

Multiple Choice - Choose the correct answer

3   If Helen walks 20 m in 30 sec, how far will she walk in one hour at the same rate?
        a 240 m   **b** 600 m   **c** $1 \cdot 2$km   **d** $2 \cdot 4$km

4   How many square tiles, 20cm long, are needed to cover a patio which is 3m long and 2m wide?
        a 25   **b** 30   **c** 150   **d** 600

5   Which is the largest?   **a** $0 \cdot 31$ **b** $\frac{1}{3}$ **c** 32%   **d** $0 \cdot 309$

6   The difference between one million dollars and one million cents is :
        a \$999 990   **b** \$999 900   **c** \$999 000   **d** \$990 000

7 A cube has a volume of 27m^3. The total surface area in cm^2 is :   **a** 5   **b** 54   **c** 81   **d** 486

8 $\sqrt{6^2 + 8^2}$ equals :   **a** 14   **b** 10   **c** 100   **d** $\sqrt{28}$

9   What decimal fraction of this flag is shaded?
        a $0 \cdot 25$
        b $0 \cdot 333$
        c $0 \cdot 375$
        d $0 \cdot 5$
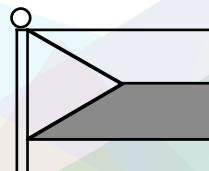
Why should you always help friend ?

Complete the following small tables by replacing each letter by the decimal answer. Then transfer the corresponding letters to the Solution Table.

The Solution Table

3.4 M	2.4 A	7.7 N	9.92 Y		27 H	12.6 A	0.7 N	14 D	10 S
6.7 M	14.7 A	5.83 K	2.8 E		60 L	54 I	5.3 G	5 H	3.52 T
9.1 E	2 A	120 S	20 Y		1.2 W	4.47 O	10.91 R	22 K	0.14 O	36.9 F
3.83 C	9.4 O	6.2 M	1 P	6 L	210 E	1.92 X		36.4 M	0.4 A	4.5 N	4 U	63 A	26.4 L
				10.7 J	18.4 O	8.72 B	12 S						

÷	3.6	12	0.42
0.6	L	Y	N
3	W	4	O

+	1.43	3.9	16
2.4	C	6.3	O
0.57	A	O	16.57

-	4.5	10	8.8
0.9	3.6	E	7.9
3.8	0.7	M	5

x	6	1.1	0.7
20	S	K	D
0.3	1.8	0.33	0.21

÷	1.6	48	0.8
4	0.4	S	0.2
0.8	2	L	1

+	8.4	7	0.68
5.6	14	A	6.28
0.32	B	7.32	1

-	9	4.7	11
0.09	8.91	4.61	R
3.7	G	1	7.3

x	4.4	9	0.8
6	L	I	4.8
0.8	T	7.2	0.64

÷	2.8	35	0.14
0.2	14	170	0.7
7	A	H	0.02

+	3.68	36	3.6
6.32	S	42.32	Y
0.9	4.58	F	N

-	6.3	20	13
5.3	1	A	N
0.47	K	19.33	12.53

x	30	5.2	0.6
0.9	H	4.68	0.54
7	E	M	4.2

+	6	0.6	7.3
3.4	O	4	J
0.7	M	1.3	8

-	1.6	4	5.2
1.2	0.4	E	U
0.6	P	M	4.6

x	4.8	126	3.2
0.4	X	50.4	1.28
0.5	A	A	1.6

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

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

Christian Avent

CHRISTIAN AVENT
B.Ed. NCAS Principal

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.