



The National
Orthodox School
Shmaisani

Mathematics

Unit 9: Decimals and percentages

The student's book

Chapter 9

Check in

- 1 a 4370
b 56300
c i 7.3 ii 3.4 iii 5.7 iv 5.0
- 2 a $\frac{3}{5}$ b $\frac{2}{3}$ c $1\frac{1}{2}$ d $\frac{3}{4}$
e $\frac{1}{3}$ f $\frac{2}{3}$

Exercise 9A

- 1 a 45000
b 0.000037
c 4300
d 0.508
e 4.7
f 0.0000264
g 9200
h 0.00045613
i 760 000 000
j 0.24
- 2 a 5
b 4
c 9
d 5
e 2
f 3
- 3 a 42000000
b 4
c 0.0031
d 49
- 4 54.1
- 5 He has just put 4 zeros on the end of the number instead of moving the digits.
- 6 a > b =

Exercise 9B

1	a 6.1	b 6.3	c 6.7	d 6.4	e 6.9
	f 7.0	g 6.4	h 6.8	i 6.1	
2	a 3.2	b 4.4	c 0.8	d 0.8	e 0.7
	f 5.0	g 6.0	h 7.1	i 1.2	
3	a 6.23	b 0.78	c 0.97	d 4.03	e 4.20
	f 6.11	g 4.00	h 0.03	i 0.21	
4	a i 6.418	ii 6.42	iii 6.4		
	b i 0.706	ii 0.71	iii 0.7		
	c i 0.022	ii 0.02	iii 0.0		
	d i 9.601	ii 9.60	iii 9.6		
	e i 7.181	ii 7.18	iii 7.2		
	f i 0.314	ii 0.31	iii 0.3		
	g i 6.300	ii 6.30	iii 6.3		
	h i 4.082	ii 4.08	iii 4.1		

- 5 a \$26.14
b $\$26.14 \times 7 = \182.98 , they need to round up what they pay to at least \$26.15
- 6 a 0.7459 b 0.74594
- 7 a 0.17 b 0.27 c 0.38 d 6.86
- 8 $7.3 + 2.4$ $24.5 + 8.19$
- 9 a i 21.78 cm ii 21.8 cm
b i 29.19 cm^2 ii 29.2 cm^2
- 10 a There will be 4 people without seats who have tickets.
b Anything between 15.75 tonnes and 16 tonnes will think it is safe to cross the bridge when it isn't.
- 11 a 7.4 b 0.40 c 0.00
- 12 a 85.0 b 61.000 c 7.90 d 7.99 e 0.0
- 13 3.4499 cm, 33.81 mm, 3.35 cm

The homework book answers.

9A

- | | | | |
|------------|-----------|------------|-------|
| 1 a 3600 | b 41000 | c 5700 | |
| d 8.5 | e 930000 | f 66000 | |
| g 80 | h 650000 | i 0.0053 | |
| j 0.078 | k 0.00366 | l 0.000476 | |
| m 0.003 | n 0.5 | o 0.000003 | |
| 2 a 4 | b 2 | c 8 | d 0 |
| e 4 | f 2 | g 4 | h 4 |
| 3 a 540000 | b 100 | c 0.72 | d 940 |
| 4 34000 | | | |
| 5 a > | b < | | |

9B

- | | | | |
|------------------------|---------------------|---------|---------|
| 1 a 6.4 | b 3.8 | c 5.0 | d 32.0 |
| e 0.1 | f 7.0 | g 5.4 | h 18.4 |
| i 454.0 | j 6.0 | k 8.9 | l 53.0 |
| 2 a 5.36 | b 8.44 | c 2.04 | d 7.78 |
| e 15.49 | f 4.30 | g 10.02 | h 45.56 |
| i 0.31 | j 0.26 | k 0.50 | l 0.40 |
| 3 a 5 | b 5 | c 8 | d 16 |
| e 11 | f 30 | g 6 | h 601 |
| 4 a 25.16cm^2 | b 25.2cm^2 | | |
| 5 a 2.33 | b 0.71 | c 1.36 | d 1.18 |
| 6 4.845 | | | |