

SHARP

Worksheet 4: Decimal Fractions

Grade 9 Mathematics

1. Complete the following table by filling in the missing values:

Decimal	Fraction	Percentage
0.336		
	$\frac{15}{50}$	
		54%
0.072		
	$\frac{9}{250}$	
		85%
0.25		
	$\frac{1}{3}$	
		4%

2. Simplify the following without using your calculator (that means show all your steps):

a) $(0.7)^2 - \sqrt{0.64}$

b) $3.16 + (1.25 \div 0.5) - 0.212$

c) $\frac{1}{2} + 11.115 - 14\% \text{ of } 12$

d) $23.604 \div 0.21 + 1.58$

e) $\sqrt[3]{0.008} - 2.19 \times 0.575$

f) $(19.588 - 13.38) \times 7.3$

g) $27.96 \times 31.92 - 7.176$

h) $43.758 - 41.369 + 1.2 \times 1.34$

i) $\sqrt{0.64} - \sqrt[3]{0.064}$

j) $\sqrt[3]{15.625} - 28.305 \times 11.02$

k) $12.84 \div 5$

l) $(0.2)^2 - (0.2)^3$

m) 9.45×0.03

n) $100 \div 0.002$

o) $24.966 + 3.456 - 54.489$

p) $83.886 \div 0.6$

q) 18.169×1.23

r) $\sqrt{1.5625} + 1.5^2$



3. Round off the following numbers to the decimal places given in the heading of the table

	3 decimal places	2 decimal places	1 decimal place	Whole number
1.65312				
9.9547				
49.661304				
3.15195				
1.4273				
5.7698				
9.9999				
0.1829				
3.5467				
2.3275				
0.0218				
2.8948				
5.92284				
3.26913				
33.2097				

4. Kirsten buys a 2.25 l bottle of coke. Kirsten drinks 0.3 of the coke while her boyfriend Ed drinks 0.45 of the coke.

- How many l of coke did Kirsten drink?
- How many l of coke did Ed drink?
- How much coke is left in the bottle?

5. Lebo purchases 0.3kg of carrots, 3 bags of potatoes weighing 2.15kg each, a loaf of bread which weighs 0.705kg and a 0.6kg box of cherries.

- How much does Lebo's shopping weigh altogether?
- If there are 12 slices of bread in the loaf, how much does one slice of bread weigh?
- Each cherry weighs on average 5g, how many cherries should Lebo expect to find in her box?
- Lebo pays R25.64 for all her shopping, what did her shopping cost per kilogram?

