DO NOT use a calculator. You must show any working. Use the back of any sheet if you need more room.				
		Homework 6. Decimals.		
Name:	Dat e:	Pre GCSE Mat hs 2004/5		

Curriculum links	Decimal place value	Marks
N2/L1.4 Read, write, order and compare decimals up to three decimal places	<ul> <li>▶ 1a. List these six numbers in descending order</li> <li>1.3 1.03 1.033 3.01 1.33 0.003</li> </ul>	
(a) understand that the position of a digit signifies its value	<ul> <li>▶ 1b. List these six numbers in ascending order</li> <li>5.64 6.45 5.06 6.07 5.1 6.007</li> </ul>	
(b) know that the decimal point separates whole numbers from decimal fractions (c) know what each digit represents,	1a) 1b) 	1
including the use of zero as a place holder		1
N2/L2.5 Order, approximate and compare decimals when solving practical problems	<ul> <li>2a. Write this decimal in words: 9.081</li> <li>2b. Write this number as a decimal: One hundred and</li> </ul>	1/2
(a) understand place value (whole nos. and up to 3 decimal places)	ninety thousand, four hundred and seven point three, zero, one.	
(b) understand that decimals can be rounded to different degrees of accuracy,	→ 3. Write the correct symbol ( < or >) between the pairs of numbers.	1
depending on purpose	11.096 11.209 0.115 0.7	1
	4.09 4.021	1
	→ 4. What does the 7 represent in these numbers:	1
	12.570 2.7611	ļ .
	<ul> <li>5a. What is the largest number you can make using all five digits and the decimal point.</li> <li>2 2 5 9 3 •</li> </ul>	1
	<ul> <li>▶ 5b. What is the smallest number you can make using all five digits and the decimal point.</li> <li>0 5 7 4 0 •</li> </ul>	1
Tutor's		
comments		10

Curriculum link	Rounding, equivalencies, x and ÷ by 10, 100.	Marks			
N2/L2.5 Order, approximate and	▶ 6. Round these decimals to the nearest whole number	4.7			
compare decimals	5.49 14.098 31.75	1/2			
when solving practical problems		1/2			
(a) understand place value (whole nos. & up		1/2			
to 3 decimal places) (b) understand that					
decimals can be rounded to different	→ 7. Round these numbers to one decimal place	1/			
degrees of accuracy,	5.49 14.098 31.44	1/2			
depending on purpose		1/2			
N2/L1.6 Multiply and divide decimals by		1/2			
10, 100 (a) understand place	N. O. D. Later and the state of				
value (whole nos. and to two-decimal places)	▶ 8. Round these numbers to two decimal places	1/2			
	5.491 14.098 31.452				
N2/L1.7 approximate decimals by		1/2			
rounding to a whole number or two		1/2			
decimal places (a) know what is	b. O Change those desimple to freetiens or mixed numbers	1			
meant by decimal places	9. Change these decimals to fractions or mixed numbers and simplify if possible.	-			
	1.4 0.7 0.55 0.28 1.27	½ 1			
equivalencies					
between common fractions, decimals					
and percentages and know how you use	→ 10. Change these fractions to decimals 3/10 92/100 2/5 1/4				
these to find part of whole number					
quantities. (a) know common		1/2 1/2			
fraction equivalents e.g.		1 1			
quarters, fifths, tenths.					
N2/L2.2 Identify equivalencies	→ 11. Multiply these numbers by 10.				
between fractions, decimals and	0.9 0.81 1.23 10.089	1/2 1/2			
percentages (a) understand that					
fractions, decimals and %s are different ways		1/21/2			
of expressing the	40 5: : 1				
same thing (c) know that decimal	→ 12. Divide these numbers by 100	4/4/			
fractions are expressed in tenths,	1.9 888.1 21.23 0.089	1/2 1/2			
hundredths, thousandths		$\frac{1}{2}\frac{1}{2}$			
Tutor's					
comments		16			

Curriculum link	Add, subtract, multiply, divide decimals.		
N2/L1.5 Add, subtract, multiply, divide decimals up to	→ 13a. Estimate an answer to 10.4 + 4.561 + 34.06	1/2	
2 places (a) know and use strategies to check answers e.g. approximate calculations using	▶ 13b. Now work out the answer exactly.	1	
whole numbers  N2/L2.6 Add,	→ 14a. £ 40.05 – £ 33.16 =	1	
subtract, multiply, divide decimals up to 3 places (a) know and use strategies to check answers e.g.	➤ 14b. How could you check your answer?	1/2	
approximate calculations using whole numbers	15. €345.63 – €79.81 =		
N2/L2.5 Order, approximate and compare decimals when solving practical problems		1	
(a) understand place value (whole nos. and up to 3 decimal places)	→ 16a. 78.9 x 16 =	1	
(b) understand that decimals can be rounded to different degrees of accuracy, depending on purpose	▶ 16b. How could you check your answer?	1/2	
	→ 17a. Estimate an answer to 5.6 x 1.7 =	4 /	
	▶ 17b. Now work out the answer exactly	1/2	
		1	
	→ 18a. 42.189 ÷ 7 =	1	
	▶ 18b. How could you check your answer?	1/2	
	<ul> <li>▶ 19a. Est imat e an answer to 405 ÷ 0.9 =</li> <li>▶ 19b. Now work it out exactly</li> </ul>	1/2	
		1	
Tutor's comments:	Total Score 36	10	

# abingdon@witneycollege

### **ANSWER SHEET**

Pre GCSE Mat hs 2004/5 Homework 6. Decimals.

## DO NOT use a calculator.

You must show any working. Use the back of any sheet if you need more room.

Curriculum links	Decimal place value		
N2/L1.4 Read, write, order and compare	▶ 1a. List these six numbers in descending order		
decimals up to three	1.3 1.03 1.033 3.01 1.33 0.003		
decimal places (a) understand that the	▶ 1b. List these six numbers in ascending order		
position of a digit	5.64 6.45 5.06 6.07 5.1 6.007		
signifies its value (b) know that the	1a) <u>3.01</u> 1b) <u>5.06</u>		
decimal point separates whole	1.33 5.1	1	
numbers from decimal	1.3 5.64		
fractions (c) know what each	1.033 6.007		
digit represents,	1.03 1.03 6.07	1	
including the use of zero as a place holder			
	<u>0.003</u> <u>6.45</u>		
N2/L2.5 Order, approximate and	▶ 2a. Write this decimal in words: 9.081		
compare decimals when solving	nine point zero (or nought) eight one	1/2	
practical problems	▶ 2b. Write this number as a decimal: One hundred and		
(a) understand place value (whole nos. and	ninety thousand, four hundred and seven point three,	1/2	
up to 3 decimal places)	zero, one. 190 407.301	/ -	
(b) understand that	→ 3. Write the correct symbol ( < or >) between the		
decimals can be rounded to different	pairs of numbers.	1	
degrees of accuracy,			
depending on purpose	11.096 < 11.209	1	
	4.09 > 4.021	1	
	→ 4. What does the 7 represent in these numbers:		
	4. What does the Frephesent in these hambers.	1	
	12.570 (seven) hundredths 2.7611 (seven) tenths	1	
	→ 5a. What is the largest number you can make using all		
	five digits and the decimal point.	1	
	2 2 5 9 3 • 9532.2		
	▶ 5b. What is the smallest number you can make using all		
	five digits and the decimal point.	1	
	0 5 7 4 0 • 0.0457		
T. 4 - 2			
Tutor's comments			
Comments		10	

### **ANSWER SHEET**

To print your own copies of this document visit: http://members.aol.com/skillsworkshop/index.htm abingdon@wilneycollege

Curriculum link	Rounding	equivalencies,		, 10 100	Marks
N2/L2.5 Order,		these decimals to			marke
approximate and compare decimals	5.49	14.098	31.75	WHOIC Hamber	1/2
when solving practical problems	5.43	14.030	32		1/2
(a) understand place	3	14	32		-
value (whole nos. & up to 3 decimal places)					1/2
(b) understand that decimals can be	N 7 Round	these numbers to	one decimal	nlace	
rounded to different degrees of accuracy,	5.49	14.098	31.44	prace	1/2
depending on purpose	5.49	14.1	31.4		1/2
N2/L1.6 Multiply and	5.49	14.1	31.4		
divide decimals by 10, 100					1/2
(a) understand place value (whole nos. and	N 9 Pound	those numbers to	two docimal	nlooo	
to two-decimal places)	5.49	these numbers to  14.098	31.45	•	1/2
N2/L1.7 approximate				2	
decimals by rounding to a whole	5.49	14.10	31.45		1/2
number or two decimal places					1/2
(a) know what is	LL O Change	those desimple t	of rootions o	r mix ad numbara	
meant by decimal places		ify if possible.	OTTACLIONS O	r mixed numbers	1
N2/L1.3 Recognise	1.4	0.7 0.55	0.28	1.27	1/2
equivalencies between common	1 2/5	7/10 11/2			1
fractions, decimals	1 2/5	7/10 11/2	20 1/25	1 21/100	1 1
and percentages and know how you use	) 10 Chang	a those freetiens	to docimals		 
these to find part of whole number	3/10	e these fractions <b>92</b> /100	2/5	1/4	
quantities. (a) know common				-	1/21/2
fraction equivalents e.g.	0.3	0.92	0.4	0.25	1 1
quarters, fifths, tenths.					
N2/L2.2 Identify equivalencies	\ 11 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	lv + b = = = = = = = = = = = = = = = = = =			
between fractions, decimals and		ly these numbers	•	10 000	1/1/
percentages	0.9	0.81	1.23	10.089	1/21/2
(a) understand that fractions, decimals and	9	8.1	12.3	100.89	1/21/2
%s are different ways of expressing the					
same thing (c) know that decimal	▶ 12. Divide these numbers by 100				
fractions are	1.9	888.1	21.23	0.089	1/21/2
expressed in tenths, hundredths,	0.019	9 8.881	0.2123	0.00089	1/21/2
thousandths					, -
Tutor's comments					

### **ANSWER SHEET**

To print your own copies of this document visit: http://members.aol.com/skillsworkshop/index.htm abingdon@wilneycollege

Curriculum link	Add, subtract, multiply, divide	decimals.	<i>y</i> - <i>y</i>	Marks
N2/L1.5 Add,	→ 13a. Est imat e an answer to 10.4 +		16	1/2
subtract, multiply, divide decimals up to	For example: $10 + 5 + 34 = 49$			<i>, L</i>
2 places (a) know and use	▶ 13b. Now work out the answer exa	ctly.		
strategies to check answers e.g.	49.021 (column addition)			1
approximate				
calculations using whole numbers	<b>→</b> 14a. £ 40.05 − £ 33.16 =			
N2/L2.6 Add,	£ 6.89 (long subtraction or mentally)			1
subtract, multiply,	2 0.00 (rong odotr dotron or moritally)			
divide decimals up to 3 places	► 14b. How could you check your ans	wer?		1/2
(a) know and use strategies to check	£ 6.89 +£ 33.16 =£ 40.05 (inverse ope			
answers e.g.				
calculations using	<b>→</b> 15. €345.63 –€79.81 =			
whole numbers	€265.82 (long subtraction)			1
N2/L2.5 Order, approximate and				
compare decimals	▶ 16a. 78.9 x 16 =			
when solving practical problems	// 10 dia 1 dia 11 10	long multipli	oction	
(a) understand place value (whole nos. and	1262.4 (any efficient written method - long multiplication,			1
up to 3 decimal	grid met hod, lattice met hod, et c.)			4 /
places) (b) understand that	<ul><li>▶ 16b. How could you check your answer?</li><li>1269.4 ÷ 16 = 78.9 (inverse operation)</li></ul>			1/2
decimals can be rounded to different				
degrees of accuracy, depending on purpose	→ 17a. Estimate an answer to 5.6 x 1	.7 =		
depending on purpose	For example 6 X 2 = 12			1/2
	→ 17b. Now work out the answer exact	-		
	9.52 (any efficient written method -	long multiplica	tion,	1
	grid met hod, lattice met hod, etc.)			1
	→ 18a. 42.189 ÷ 7 =			
	6.027 (long or short division)			1
	▶ 18b. How could you check your answer?			1/2
	6.027 x 7 = 42.189			
	→ 19a. Estimate an answer to 405 ÷ (	 )		
	For example $400 \div 1 = 400$			1/2
			72	
	<ul><li>▶ 19b. Now work it out exactly</li><li>450 (short division)</li></ul>			
				1
Tutor's				
comments:		Tot al Score	36	10
				. •