

Name:	Date:	Pre GCSE Maths 2004/5 Homework 6. Decimals.
DO NOT use a calculator.		
You <u>must show</u> any working. Use the back of any sheet if you need more room.		

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

Name:

abingdon & witney college

Curriculum link	Rounding, equivalencies, x and ÷ by 10, 100.	Marks	
<p>N2/L2.5 Order, approximate and compare decimals when solving practical problems (a) understand place value (whole nos. & up to 3 decimal places) (b) understand that decimals can be rounded to different degrees of accuracy, depending on purpose</p> <p>N2/L1.6 Multiply and divide decimals by 10, 100 (a) understand place value (whole nos. and to two-decimal places)</p> <p>N2/L1.7 approximate decimals by rounding to a whole number or two decimal places (a) know what is meant by decimal places</p> <p>N2/L1.3 Recognise equivalencies between common fractions, decimals and percentages and know how you use these to find part of whole number quantities. (a) know common fraction equivalents e.g. quarters, fifths, tenths.</p> <p>N2/L2.2 Identify equivalencies between fractions, decimals and percentages (a) understand that fractions, decimals and %s are different ways of expressing the same thing (c) know that decimal fractions are expressed in tenths, hundredths, thousandths</p>	<p>▶▶ 6. Round these decimals to the nearest whole number</p> <p style="text-align: center;">5.49 14.098 31.75</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 7. Round these numbers to one decimal place</p> <p style="text-align: center;">5.49 14.098 31.44</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 8. Round these numbers to two decimal places</p> <p style="text-align: center;">5.491 14.098 31.452</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 9. Change these decimals to fractions or mixed numbers and simplify if possible.</p> <p style="text-align: center;">1.4 0.7 0.55 0.28 1.27</p>	<p>1</p> <p>½</p> <p>1</p> <p>1</p> <p>1</p>	
	<p>▶▶ 10. Change these fractions to decimals</p> <p style="text-align: center;">3/10 92/100 2/5 1/4</p>	<p>½ ½</p> <p>1 1</p>	
	<p>▶▶ 11. Multiply these numbers by 10.</p> <p style="text-align: center;">0.9 0.81 1.23 10.089</p>	<p>½ ½</p> <p>½ ½</p>	
	<p>▶▶ 12. Divide these numbers by 100</p> <p style="text-align: center;">1.9 888.1 21.23 0.089</p>	<p>½ ½</p> <p>½ ½</p>	
	Tutor's comments		<hr style="width: 100px; margin: 0 auto;"/> <p>16</p>

Name:

abingdon^{OX}witney college

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

ANSWER SHEET

Pre GCSE Maths 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	Marks	
<p>N2/L1.4 Read, write, order and compare decimals up to three decimal places (a) understand that the position of a digit signifies its value (b) know that the decimal point separates whole numbers from decimal fractions (c) know what each digit represents, including the use of zero as a place holder</p> <p>N2/L2.5 Order, approximate and compare decimals when solving practical problems (a) understand place value (whole nos. and up to 3 decimal places) (b) understand that decimals can be rounded to different degrees of accuracy, depending on purpose</p>	<p>▶▶ 1a. List these six numbers in descending order 1.3 1.03 1.033 3.01 1.33 0.003</p> <p>▶▶ 1b. List these six numbers in ascending order 5.64 6.45 5.06 6.07 5.1 6.007</p> <p>1a) <u>3.01</u> <u>1.33</u> <u>1.3</u> <u>1.033</u> <u>1.03</u> <u>0.003</u></p> <p>1b) <u>5.06</u> <u>5.1</u> <u>5.64</u> <u>6.007</u> <u>6.07</u> <u>6.45</u></p>	<p>1</p> <p>1</p>	
	<p>▶▶ 2a. Write this decimal in words: 9.081 nine point zero (or nought) eight one</p> <p>▶▶ 2b. Write this number as a decimal: One hundred and ninety thousand, four hundred and seven point three, zero, one. 190 407.301</p>	<p>½</p> <p>½</p>	
	<p>▶▶ 3. Write the correct symbol (< or >) between the pairs of numbers.</p> <p>11.096 < 11.209 0.115 < 0.7</p> <p>4.09 > 4.021</p>	<p>1</p> <p>1</p> <p>1</p>	
	<p>▶▶ 4. What does the 7 represent in these numbers:</p> <p>12.570 (seven) hundredths 2.7611 (seven) tenths</p>	<p>1</p> <p>1</p>	
	<p>▶▶ 5a. What is the largest number you can make using all five digits and the decimal point. 2 2 5 9 3 • 9532.2</p> <p>▶▶ 5b. What is the smallest number you can make using all five digits and the decimal point. 0 5 7 4 0 • 0.0457</p>	<p>1</p> <p>1</p>	
	Tutor's comments		<p>10</p>

ANSWER SHEET

Curriculum link	Rounding, equivalencies, x and ÷ by 10, 100.	Marks	
<p>N2/L2.5 Order, approximate and compare decimals when solving practical problems (a) understand place value (whole nos. & up to 3 decimal places) (b) understand that decimals can be rounded to different degrees of accuracy, depending on purpose</p> <p>N2/L1.6 Multiply and divide decimals by 10, 100 (a) understand place value (whole nos. and to two-decimal places)</p> <p>N2/L1.7 approximate decimals by rounding to a whole number or two decimal places (a) know what is meant by decimal places</p> <p>N2/L1.3 Recognise equivalencies between common fractions, decimals and percentages and know how you use these to find part of whole number quantities. (a) know common fraction equivalents e.g. quarters, fifths, tenths.</p> <p>N2/L2.2 Identify equivalencies between fractions, decimals and percentages (a) understand that fractions, decimals and %s are different ways of expressing the same thing (c) know that decimal fractions are expressed in tenths, hundredths, thousandths</p>	<p>▶▶ 6. Round these decimals to the nearest whole number</p> <p>5.49 14.098 31.75</p> <p>5 14 32</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 7. Round these numbers to one decimal place</p> <p>5.49 14.098 31.44</p> <p>5.49 14.1 31.4</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 8. Round these numbers to two decimal places</p> <p>5.491 14.098 31.452</p> <p>5.49 14.10 31.45</p>	<p>½</p> <p>½</p> <p>½</p>	
	<p>▶▶ 9. Change these decimals to fractions or mixed numbers and simplify if possible.</p> <p>1.4 0.7 0.55 0.28 1.27</p> <p>1 2/5 7/10 11/20 7/25 1 27/100</p>	<p>1</p> <p>½</p> <p>1</p> <p>1</p> <p>1</p>	
	<p>▶▶ 10. Change these fractions to decimals</p> <p>3/10 92/100 2/5 ¼</p> <p>0.3 0.92 0.4 0.25</p>	<p>½ ½</p> <p>1 1</p>	
	<p>▶▶ 11. Multiply these numbers by 10.</p> <p>0.9 0.81 1.23 10.089</p> <p>9 8.1 12.3 100.89</p>	<p>½ ½</p> <p>½ ½</p>	
	<p>▶▶ 12. Divide these numbers by 100</p> <p>1.9 888.1 21.23 0.089</p> <p>0.019 8.881 0.2123 0.00089</p>	<p>½ ½</p> <p>½ ½</p>	
	Tutor's comments		<hr/> <p>16</p>

ANSWER SHEET

Curriculum link	Add, subtract, multiply, divide decimals.	Marks	
<p>N2/L1.5 Add, subtract, multiply, divide decimals up to 2 places (a) know and use strategies to check answers e.g. approximate calculations using whole numbers</p> <p>N2/L2.6 Add, subtract, multiply, divide decimals up to 3 places (a) know and use strategies to check answers e.g. approximate calculations using whole numbers</p> <p>N2/L2.5 Order, approximate and compare decimals when solving practical problems (a) understand place value (whole nos. and up to 3 decimal places) (b) understand that decimals can be rounded to different degrees of accuracy, depending on purpose</p>	<p>▶▶ 13a. Estimate an answer to $10.4 + 4.561 + 34.06$ For example: $10 + 5 + 34 = 49$</p> <p>▶▶ 13b. Now work out the answer exactly. 49.021 (column addition)</p>	<p>1/2</p> <p>1</p>	
	<p>▶▶ 14a. $£40.05 - £33.16 =$ £6.89 (long subtraction or mentally)</p> <p>▶▶ 14b. How could you check your answer? £6.89 + £33.16 = £40.05 (inverse operation)</p>	<p>1</p> <p>1/2</p>	
	<p>▶▶ 15. $€345.63 - €79.81 =$ €265.82 (long subtraction)</p>	<p>1</p>	
	<p>▶▶ 16a. $78.9 \times 16 =$ 1262.4 (any efficient written method - long multiplication, grid method, lattice method, etc.)</p> <p>▶▶ 16b. How could you check your answer? 1269.4 ÷ 16 = 78.9 (inverse operation)</p>	<p>1</p> <p>1/2</p>	
	<p>▶▶ 17a. Estimate an answer to $5.6 \times 1.7 =$ For example $6 \times 2 = 12$</p> <p>▶▶ 17b. Now work out the answer exactly 9.52 (any efficient written method - long multiplication, grid method, lattice method, etc.)</p>	<p>1/2</p> <p>1</p>	
	<p>▶▶ 18a. $42.189 \div 7 =$ 6.027 (long or short division)</p> <p>▶▶ 18b. How could you check your answer? 6.027 x 7 = 42.189</p>	<p>1</p> <p>1/2</p>	
	<p>▶▶ 19a. Estimate an answer to $405 \div 0.9 =$ For example $400 \div 1 = 400$</p> <p>▶▶ 19b. Now work it out exactly 450 (short division)</p>	<p>1/2</p> <p>1</p>	
	<p>Tutor's comments:</p>	<p style="text-align: right;">Total Score 36 10</p>	