Planner

Decimals (1)

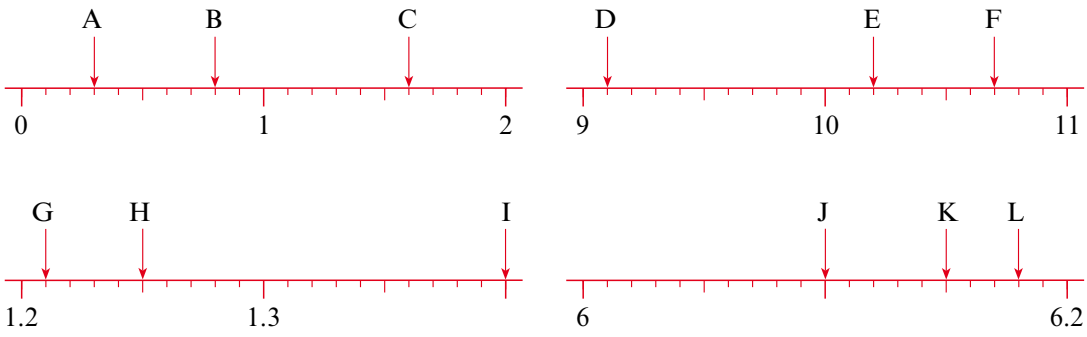
- Reading decimals from a number line
- Ordering decimals
- Rounding decimals to the nearest whole number
- Rounding decimals to one decimal place

Keywords

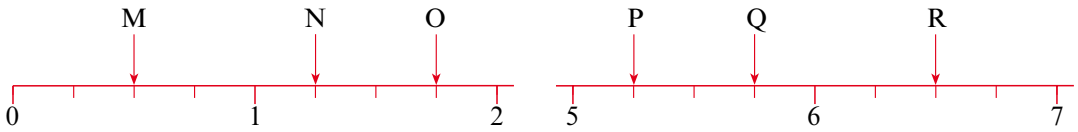
You should know

explanation 1a | explanation 1b | online

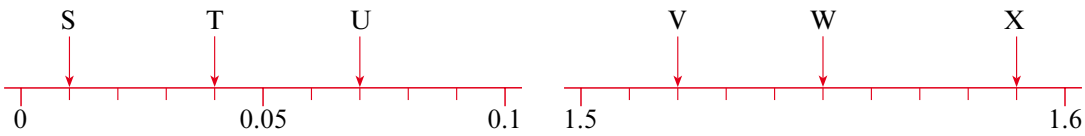
1 Here are some number lines. Write the numbers shown by the arrows.



2 Here are some number lines. Write the numbers shown by the arrows.



3 Here are some number lines. Write the numbers shown by the arrows.



explanation 2

4 Write the value of each underlined digit in words.

a 7.2̲1 **b** 0.2̲87 **c** 124.3̲8 **d** 0.00̲4

5 Write the value of each underlined digit as a fraction.

a 2.$\underline{7}$65 **b** 0.91$\underline{4}$ **c** 12.3$\underline{8}$ **d** 36.$\underline{9}$5

6 Write these numbers as decimals.

a Three tenths
b Five hundredths
c Nine thousandths
d One and six tenths
e Four and seven hundredths
f Twelve and three tenths

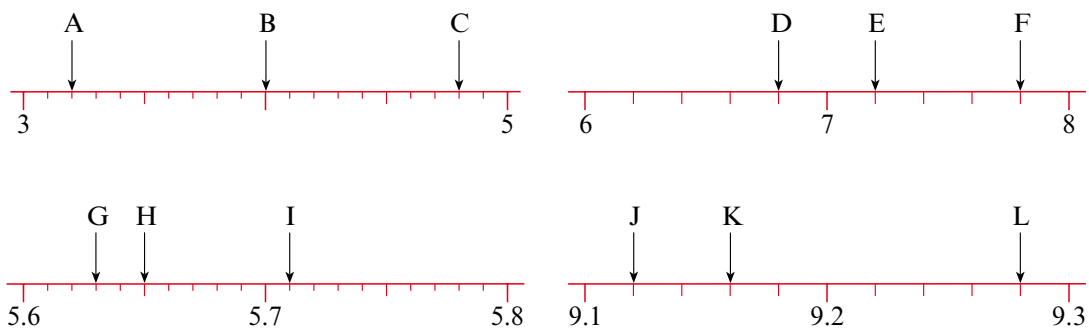
7 Write each fraction below as a decimal and in words.

a $\frac{3}{10}$ **b** $\frac{7}{100}$ **c** $\frac{6}{1000}$ **d** $\frac{12}{100}$

8 Copy and complete the table. The first one has been done for you.

	Number in words	Decimal	Fraction
	Three tenths	0.3	$\frac{3}{10}$
a		0.6	
b			$\frac{4}{100}$
c	Eight thousandths		
d			$\frac{25}{100}$
e	Seven tenths and five hundredths		

***9** Here are some number lines. What number is shown by each arrow?



explanation 3 online

10 David says that 2.125 is bigger than 2.34 because 125 is bigger than 34.

Explain why David is wrong.

T	U	.	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
	2	.	3	4	
	2	.	1	2	5

11 Write the numbers 6.2, 6.35, 6.04 and 6.175 in order of size.
Start with the smallest.

Use the decimal table to help you.

T	U	.	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
		.			
		.			

12 Write these numbers in order of size, smallest first.

a 6, 5.9, 5.849, 5.85, 5.49

b 11.3, 11.56, 11.18, 11.29, 11.06

c 0.278, 0.25, 0.3, 0.249, 0.28

d 7.127, 7.123, 7.12, 7.129, 7.192

e 0.0738, 0.0729, 0.073, 0.0732

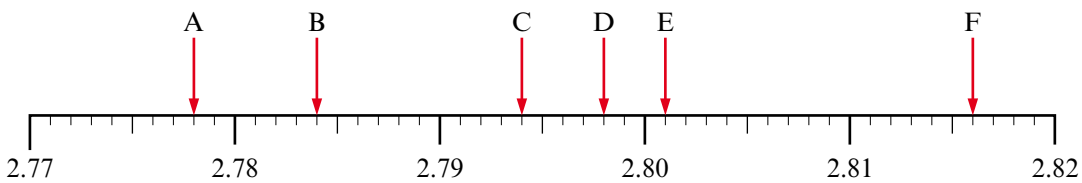
f 19.1, 19.09, 19.18, 19.099, 19.178

g 3.25, 32.5, 3.125, 31.5, 1.35

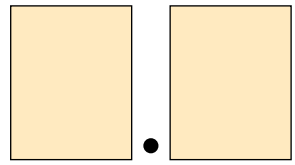
h 12.3, 12.25, 12.52, 12.1, 12, 12.325

13 Match the following numbers to the labelled points on the number line.

2.798, 2.801, 2.778, 2.794, 2.816, 2.784



14 Here are two digit cards separated by a decimal point.



You can choose two of the four digits 1, 2, 3 and 4 to make a number.

You can only use each digit once in any number that you make.

Make a list of all the possible numbers in order of size, largest first.

explanation 4a explanation 4b online

15 Round each amount to the nearest pound.

a £8.47	**b** £3.52	**c** £12.70	**d** £19.73
e £37.56	**f** £11.11	**g** £96.45	**h** £87.50

16 Round these decimals to the nearest whole number. Use the diagram to help.

a 9.4	**b** 7.7	**c** 5.5	**d** 7.48
e 9.75	**f** 8.51	**g** 10.47	**h** 6.5

17 Round each amount to the nearest 10p.

a £1.47	**b** £3.12	**c** £3.79	**d** £10.98
e £7.56	**f** £13.51	**g** £36.44	**h** £42.55

18 Round these decimals to 1 d.p. Use the diagram to help.

a 8.93	**b** 8.66	**c** 9.04	**d** 8.74
e 8.75	**f** 9.048	**g** 8.863	**h** 9.119