

Y7 Maths

Unit 6 Test

Decimals

Name: Marlscheme

- 1 Write these decimals in order. Start with the smallest decimal.

4.8 4.069 4.501 4.15

4.069, 4.15, 4.501, 4.8

(1 mark)

- 2 Work out

a $3.6 + 4.85$

$$\begin{array}{r} 3.6 \\ + 4.85 \\ \hline 8.45 \end{array}$$

8.45

b $12.3 - 2.89$

$$\begin{array}{r} 12.30 \\ - 2.89 \\ \hline 9.41 \end{array}$$

9.41

(2 marks)

- 3 Write $<$ or $>$ for each pair of numbers.

a $-6.48 > -6.5$

b $5.983 < 5.99$

c $-3.09 < -3.01$

(3 marks)

- 4 Round these numbers correct to 2 decimal places.

a 16.487

16.49

b 5.090

5.09

c 4.0899

4.09

(3 marks)

- 5 Work out 4.06×7

$$\begin{array}{r} 4.06 \\ \times 7 \\ \hline 28.42 \end{array}$$

$$\underline{28.42}$$

(1 mark)

- 6 Work out $6.36 \div 6$

$$\begin{array}{r} 1.06 \\ 6 \overline{) 6.36} \end{array}$$

$$\underline{1.06}$$

(1 mark)

- 7 Work out

a $2.046 \div 0.2$

$$\begin{array}{r} 20.46 \div 2 \\ 10.23 \\ 2 \overline{) 20.46} \end{array}$$

(m)

$$\underline{10.23}$$

(A)

b $4.08 \div 0.05$

$$\begin{array}{r} 408 \div 5 \\ 0.816 \\ 5 \overline{) 408.0} \end{array}$$

(m)

$$\underline{81.6}$$

(A)

(4 marks)

- 8 Copy and complete this table. Write fractions in their simplest form.

Fraction	Decimal	Percentage
$\frac{13}{40}$	0.325	32.5%
$\frac{49}{200}$	0.245	24.5%
$\frac{7}{40}$	0.175	17.5%

(6 marks)

- 9 Given that $4.5 \times 6.38 = 28.71$, find the values of

a 45×0.638

$$\underline{28.71}$$

b $2.871 \div 0.045$

$$\underline{63.8}$$

(2 marks)

- 10 Put these numbers in order. Start with the smallest number.

33% 38 0.35 13

33%, 0.35, 13, 38

(1 mark)

- 11 Find 13% of £250

$$\begin{array}{r} 10\% = £25 \\ 1\% = £2.50 \\ 1\% = £2.50 \\ 1\% = £2.50 \\ \hline 32.50 \end{array}$$

(M1)

(A1)

£ 32.50

(2 mark)

- 12 In a sale, a shopkeeper reduces all the normal prices of clothes by 35%

A skirt has a normal price of £46

Work out the price in the sale.

$$\begin{array}{r} 10\% = 4.60 \\ 5\% = 2.30 \\ \hline 13.80 \\ 2.30 \\ \hline 16.10 \end{array}$$

(M1)

$$\begin{array}{r} £46.00 \\ 16.10 \\ \hline £29.90 \end{array}$$

(M1)

£ 29.90

(A1)

(3 marks)

- 13 Jim invested £5000 in a business.

After one year the value of his investment had increased by 12%

Work out the value of his investment after one year.

$$\begin{array}{r} 10\% = £500 \\ 1\% = 50 \\ 1\% = 50 \\ \hline £600 \end{array}$$

(M1)

$$\begin{array}{r} 5000 \\ +600 \\ \hline 5600 \end{array}$$

(M1)

£ 5600

(A1)

(3 marks)

- 14 Two hundred students voted in a school election.

Gemma got 60 votes.

What percentage of the votes did she get?

$$\frac{60}{200} = \frac{30}{100}$$

.....30.....%

(1 mark)

- 15 Work out

a $0.75 - 0.2 \times 0.4$

$0.75 - 0.08$ (M1)

.....0.67..... (A1)

b $5 \times (1 - 0.3)$

5×0.7 (M1)

.....3.5..... (A1)

c $0.2 \times 0.6 + 0.9 \times 0.4$

$0.12 + 0.36$ (M1)

.....0.48..... (A1)

d $0.6 - 0.4^2$

$0.6 - 0.16$ (M1)

.....0.44..... (A1)

(8 marks)

- 16 Thirty per cent of the people in a sports club are female.

There are 245 males in the sports club.

How many females are there in the sports club?

$70\% = 245$ (M1)

$10\% = 35$ (M1)

$30\% = 35 \times 3$

.....105..... (A1)

(3 marks)

- 17 When Sophie uses a rail card, the full price of a ticket is reduced by $\frac{1}{3}$

She uses her rail card and pays £27 for a ticket.

Work out the full price of a ticket.

$$\frac{2}{3} = £27 \quad (m)$$

£ 40.50 (A)

(2 marks)

[END OF TEST]

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If you've finished, and checked your work, try this challenge.

YOU WILL NOT BE MARKED ON THIS SECTION

Work out the missing digits in each of these.

a

$$\begin{array}{r} 4 \square . 83 \\ - 25 . \square 4 \\ \hline \square 6 . 89 \end{array}$$

b

$$\begin{array}{r} 7 \square . 6 \\ - \square 6 . 54 \\ \hline 17 . \square 6 \end{array}$$