

DECIMAL ARITHMETIC

CONTENT DOMAIN REFERENCES:

F9, F10

KS2 SATS

PRACTICE QUESTIONS BY TOPIC

1 $6.1 + 0.3 =$

[2016S]

A handwritten addition sum on lined paper: $\begin{array}{r} 6.1 \\ + 0.3 \\ \hline 5.8 \end{array}$. The result 5.8 is written in a separate box below the sum.

5.8

[1 mark]

2 $2.5 + 0.05 =$

[2016S]

A handwritten addition sum on lined paper: $\begin{array}{r} 2.50 \\ + 0.05 \\ \hline 2.55 \end{array}$. The result 2.55 is written in a separate box below the sum.

2.55

[1 mark]

3 Circle two numbers that add together to equal 0.25

[2016]

0.05

0.23

0.2

0.5

[1 mark]

4

$$4 - 1.15 =$$

[2016]

| | |
|--|--------|
| $\begin{array}{r} 34.910 \\ - 1.15 \\ \hline 2.85 \end{array}$ | 2.85 |
|--|--------|

[1 mark]

5

Circle two numbers which add to make 0.12

[2000]

- 0.1 0.5 **0.05** 0.7 **0.07** 0.2

[1 mark]

6

$$9 - 3.45 =$$

[2017]

| | |
|---|--------|
| $\begin{array}{r} 89.91 \\ - 3.45 \\ \hline 5.55 \end{array}$ | 5.55 |
|---|--------|

[1 mark]

7

Circle two decimals that have a difference of 0.5

[2009]



- 0.2 **0.25** 0.4 0.45 0.6 **0.75**

[1 mark]

8

Two decimal numbers add together to equal 1

[2016S]

One of the numbers is 0.007

What is the other number?

0.993

[1 mark]

9

$$15.4 - 8.88 =$$

[2016S]

$$\begin{array}{r}
 1\ 8\overset{1}{4}\overset{1}{0} \\
 - 8\cdot 8\ 8 \\
 \hline
 6\cdot 5\ 2
 \end{array}$$

6.52

[1 mark]

10

Jacob cuts 4 metres of ribbon into **three** pieces.

[2016]

The length of the first piece is **1.28** metres.

The length of the second piece is **1.65** metres.

Work out the length of the third piece.

Show your method

$$\begin{array}{r}
 1\cdot 28 \\
 + 1\cdot 65 \\
 \hline
 2\cdot 93
 \end{array}$$

$$\begin{array}{r}
 4\cdot 9\overset{1}{6} \\
 - 2\cdot 9\ 3 \\
 \hline
 1\cdot 0\ 7
 \end{array}$$

1.07 m

[2 marks]

11

$$3.005 + 6.12 =$$

[2016]

$$\begin{array}{r} 3.005 \\ + 6.120 \\ \hline 9.125 \end{array}$$

$$9.125$$

[1 mark]

12

$$2.7 + 3.014 =$$

[2017]

$$\begin{array}{r} 2.700 \\ + 3.014 \\ \hline 5.714 \end{array}$$

$$5.714$$

[1 mark]

13

$$15.98 + 26.314 =$$

[2016]

$$\begin{array}{r} 15.980 \\ + 26.314 \\ \hline 42.294 \end{array}$$

$$42.294$$

[1 mark]

14

$$125.48 - 72.3 =$$

[2016]

| | |
|--|---------|
| $\begin{array}{r} 125.48 \\ - 72.30 \\ \hline 53.18 \end{array}$ | 53.18 |
|--|---------|

[1 mark]

15

Circle the two decimals which are **closest in value** to each other.

[2002]

- 0.9 **0.09** 0.99 **0.1** 0.01
0.10

[1 mark]

16

$$37.8 - 14.671 =$$

[2017]

| | |
|--|----------|
| $\begin{array}{r} 37.800 \\ - 14.671 \\ \hline 23.129 \end{array}$ | 23.129 |
|--|----------|

[1 mark]

17

Write in the missing number.

[2015]

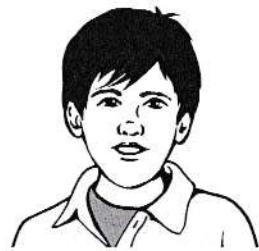
8.5 + 14.7 = 10.2 + **13**
23.2

[1 mark]

18

Alfie says,

[2015]



'When you multiply two numbers together, the answer is always greater than either of the numbers you started with.'

Is Alfie correct?
Circle Yes or No.

Yes / No

Explain how you know.

BECAUSE WHEN YOU MULTIPLY
BY A NUMBER LESS THAN ONE,
THE ANSWER WILL GET SMALLER.

E.G. $12 \times 0.5 = \underline{6}$

EXAMPLES ARE VERY USEFUL

[1 mark]

19

$1.28 \times 100 =$

[2016S]

| |
|----------------------------------|
| $1.28 \times 100,$ |
| <input type="text" value="128"/> |

[1 mark]

20

$$0.04 \div 10 =$$

[2017]

$$0.04 \div 10$$

$$0.004$$

[1 mark]

21

$$0.9 \times 200 =$$

[2017]

$$0.9 \times 200 = 1.8 \times 100$$

$$= 180$$

$$180$$

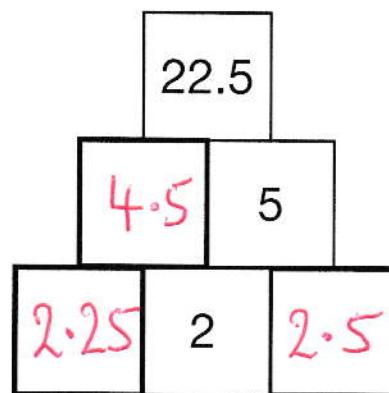
[1 mark]

22

The number in a box is the **product** of the two numbers below it.

[2016S]

Write the missing numbers.



[2 marks]

23

$$0.9 \div 10 =$$

[2016]

$0.9 \div 10 =$

0.09

[1 mark]

24

$$15 \times 6.1 =$$

[2016]

$\begin{array}{r} 15 \\ \times 61 \\ \hline 15 \\ 900 \\ \hline 915 \end{array}$ $\begin{array}{r} 15 \\ \times 6.1 \\ \hline 91.5 \end{array}$

91.5

[1 mark]

25

$$1.52 \times 6 =$$

[2016S]

$\begin{array}{r} 152 \\ \times 6 \\ \hline 912 \end{array}$ $\begin{array}{r} 1.52 \\ \times 6 \\ \hline 9.12 \end{array}$

9.12

[1 mark]

26

Write two decimals, each less than 1, which multiply to make 0.1

[2001]

$$\boxed{0.5} \times \boxed{0.2} = 0.1$$

[I ACTUALLY
THOUGHT OF
 $\frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$