Name:

Exam Style Questions

Decimals: Multiplication and Division

Corbettmaths

Equipment needed: Pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 92, 93, 94

Answers and Video Solutions

1. Work out 7.28×2

$$\begin{array}{r} 7.28 \\ \times \quad 2 \\ \hline 14.56 \end{array}$$

14.56

(1)

2. Work out 1.9×3

$$\begin{array}{r} 1.9 \\ \times \quad 3 \\ \hline 5.7 \end{array}$$

5.7

(1)

3. Work out 8.47×5

$$\begin{array}{r} 8.47 \\ \times \quad 5 \\ \hline 42.35 \end{array}$$

42.35

(1)

4. Work out $1.6 \div 2$

$$2\overline{)1.6} \quad 0.8$$

0.8

(1)

5. Work out $0.9 \div 3$

$$3\overline{)0.9} = 0.3$$

0.3

(1)

6. A piece of string is 4.8m long.

The string is cut into 8 pieces of equal length.

Work out how long each piece is.

$$8\overline{)4.8} = 0.6$$

0.6 m

(2)

7. Circle the answer to 40×0.3

1200 120 (12) 1.2

$40 \times 3 = 120$

$40 \times 0.3 = 12$

(1)

8. Work out $9.35 \div 5$

$$5\overline{)9.35} = 1.87$$

1.87

(2)

9. Work out $1055.16 \div 9$

$$9\overline{)1055.16} = 117.24$$

117.24

(2)

10. Work out

(a) 0.3×0.2

$3 \times 2 = 6$

$0.3 \times 0.2 = 0.06$

$3 \times 2 = 6$

0.06

0.06

(1)

(b) 0.8×1.2

$8 \times 12 = 96$

0.96

(2)

11. Work out

(a) $5.18 \div 7$

$$7\overline{)5.18} = 0.74$$

0.74

(2)

(b) $16.44 \div 0.3$

$164.4 \div 3$

$$3\overline{)164.4} = 054.8$$

54.8

(2)

12. Work out

(a) 0.3×0.3

$3 \times 3 = 9$

0·09

(1)

(b) 0.06×0.4

$6 \times 4 = 24$

0·024

(1)

(c) 1.9×1.2

$$\begin{array}{r} 19 \\ \times\ 12 \\ \hline 38 \\ +190 \\ \hline 228 \end{array}$$

2·28

(2)

(d) 12.4×0.7

$$\begin{array}{r} 124 \\ \times\ 7 \\ \hline 868 \end{array}$$

8·68

(2)

(e) 75.2×0.23

$$\begin{array}{r} 752 \\ \times\ 23 \\ \hline 2256 \\ +15040 \\ \hline 17296 \end{array}$$

17·296

(2)

13. Work out

(a) $120 \div 0.3$

$1200 \div 3$

$3\overline{)1200}$ → 0400

400

(1)

(b) $14.04 \div 6$

$6\overline{)14.04}$ → 02.34

2.34

(2)

(c) $0.845 \div 5$

$5\overline{)0.845}$ → 0.169

0.169

(2)

(d) $1.72 \div 0.8$

$17.2 \div 8$

$8\overline{)17.20}$ → 02.15

2.15

(2)

(e) $5 \div 0.04$

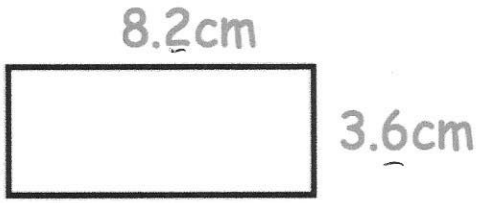
$500 \div 4$

$4\overline{)500}$ → 125

125

(2)

14. Shown below is a rectangle.



Find the area of the rectangle.
Include units.

$$\begin{array}{r} 82 \\ \times\ 36 \\ \hline 492 \\ 2460 \\ \hline 2952 \end{array}$$

29.52cm² .....

(3)

---

15. State whether each answer is more than 20 or less than 20.
Write "more than" or "less than" for each.

(a) 20×0.8

16

less than .....

(b) $20 \div 0.8$

25

more than .....

(c) 0.2×200

40

more than .....

(d) $0.2 \div 200$

0.001

less than .....

(2)

16. You are given that $358 \times 26 = 9308$

Use this information to find the answers to

(a) 3580×260

930800

(1)

(b) 3.58×2.6

9.308

(1)

(c) 3580×0.26

930.8

(1)

(d) $93080 \div 2.6$

35800

(1)

358 x 26
↓ x2

(e) 358×52

9308
× 2
18616

18616

(2)

17. You are given that $29 \times 1374 = 39846$

Use this information to find the answers to

(a) $39846 \div 29$

1374

(1)

(b) 2.9×13.74

39.846

(1)

(c) 0.29×13740

3984.6

(1)

(d) $398.46 \div 1.374$

290

(1)

(e) 58×1374

79692

(2)

18. Mrs Webb has a roll of ribbon that is 44.1m long.
She needs strips of ribbon that are 2.5m long

How many 2.5m strips will Mrs Webb get from the roll?

25
50
75
100
125
150
175

$44.1 \div 2.5$

$441 \div 25$

$$25 \overline{)4^{4}4^{19}1.^{16}0^{10}0} \quad 017.64$$

17

(3)

---

19. Alison changes £16 into US dollars.
The exchange rate is £1 to $1.40

How many US dollars does Alison receive?

$$\begin{array}{r} 1.40 \\ \times\ 16 \\ \hline 8.40 \\ +\ 14.00 \\ \hline 22.40 \end{array}$$

$22.40

(2)

---

20. In a shop, garden gnomes cost £6.79 each.

Work out the cost of 5 garden gnomes.

$$\begin{array}{r} 6.79 \\ \times\ 5 \\ \hline 34 \\ 33.95 \end{array}$$

£33.95

(2)

21. Work out

(a) 0.2×0.1

$2 \times 1 = 2$

0.02

(1)

(b) 0.7^2

0.7×0.7

$7 \times 7 = 49$

0.49

(1)

(c) 0.2^3

$0.2 \times 0.2 \times 0.2$

$2 \times 2 \times 2 = 8$

0.008

(2)

---

22. Scott has a rope 8 metres long.
He says, "I need 9 pieces each 0.89 metres long."

Will Scott have enough rope?
Explain your answer.

$$\begin{array}{r} 0.89 \\ \times \quad 9 \\ \hline 8.01 \end{array}$$

No, he is 1cm short as he has 8m and needs 8.01m.

(3)

23. Work out

$$\frac{4}{0.08}$$

$400 \div 8 = 50$

50

.....

(2)

24. Shown below is a rectangle.

The area of the rectangle is 17.92cm²
Find y.

56
112
168
224
280

$17.92 \div 5.6$

$179.2 \div 56$

$$56 \overline{)179.20} = 3.2$$

3.2cm

.....

(2)

25. Shown below is a 2 pence coin.

: 0.185cm

Each 2 pence coin is 0.185cm thick.
Stephen builds a tower of 250 2p coins.

How tall is the tower?

185
×250
1 4 1 2
9250
37000
46.250

46.25cm

(3)

26. Work out 72.8×6.3

728
×63
1 4 2
2184
43680
+
45864

458.64

(3)

27. (a) Work out 2.59×4.8

259
× 48
2072
10360
+ 12432

12.432

(3)

(b) Work out $35.28 \div 1.8$

352.8 ÷ 18

0 19 . 6
18 | 352.80

18
36
54
72
90
108
126
144
162
180

19.6

(3)

28. Work out 0.006×0.42

6 × 42 = 252

42
× 6
252

0.00252

(2)

29. Work out $9.51 \div 0.15$

$951 \div 15$

15
30
45
60
75
90

$$15 \overline{)9^{9}5^{5}1.^{6}00} \quad 063.4$$

63.4

.....

(3)

30. Work out 0.69×0.34

$$\begin{array}{r} 69 \\ \times\ 34 \\ \hline 276 \\ +\ 2070 \\ \hline 2346 \end{array}$$

0.2346

.....

(3)

31. A plant grows at a rate of 3cm each week.

(a) After how many weeks does it take the plant to grow from a height of 70cm to a height of 1.24m?

$124 - 70 = 54$ or $1.24 - 0.7 = 0.54$

$0.54 \div 0.03 = 18$

$3 \overline{)54}$ → 18

18

.....

(3)

(b) If the rate that the plant grows is less than 3cm each week, what effect will that have on your answer to part (a)?

The number of weeks will increase if the rate the plant grows decreases.

.....

(1)

---

32. Work out $60.08 - 5.58 \div 0.2$

$5.58 \div 0.2$

$55.8 \div 2$

$60.08 - 27.9$

$2 \overline{)55.8}$ → 27.9

$\begin{array}{r} 5\,9\,1 \\ 60.08 \\ -27.90 \\ \hline 32.18 \end{array}$

32.18

.....

(3)

33. When full, the water in Kezia's swimming pool has a depth of 1.6m

Kezia starts to empty the swimming pool.
The depth of the pool decreases by 7.5cm each minute.

(a) Assume that the depth of the water continues to decrease at the same rate.

After how many minutes will the depth of the water in the swimming pool reach 40cm?

160 - 40 = 120

120 ÷ 7.5

1200 ÷ 75

0016
75 | 12 12 45 0

75
150
225
300
375
450
525
600

16

.....

(3)

(b) In fact, the depth of water decreases at a faster rate.

How does this affect your answer to part (a)?

If the depth of water decreases at a faster rate, the number of minutes taken (a) will decrease from 16.

.....

(1)