

**RELATED CALCULATIONS - PRACTICE QUESTIONS
NON-CALCULATOR**

1.

Use the fact that

$$46 \times 22 = 1012$$

to work out:

(a) 46×11

$$1012 \div 2 = 506$$

(b) 23×22

$$1012 \div 2 = 506$$

(c) 92×44

$$1012 \times 4 = 4048$$

(d) $1012 \div 46$

$$22$$

(e) $1012 \div 44$

$$46 \div 2 = 23$$

2.

Use the fact that

$$102 \times 32 = 3264$$

to work out:

(a) 102×96

$$3264 \times 3 = 9792$$

(b) 51×64

$$3264$$

(c) 204×32

$$3264 \times 2 = 6528$$

(d) $3264 \div 32$

$$102$$

(e) $3264 \div 51$

$$32 \times 2 = 64$$

3.

Use the fact that

$$36 \times 98 = 3528$$

to work out:

(a) 12×98

$$3528 \div 3 = 1176$$

(b) 72×49

$$3528$$

(c) $3528 \div 49$

$$36 \times 2 = 72$$

(d) $3528 \div 72$

$$98 \div 2 = 49$$

(e) 9×196

$\div 4 \times 2$

$$3528 \div 2 = 1764$$

4.

Use the fact that

$$125 \times 404 = 50500$$

to work out:

(a) 125×202

$$50500 \div 2 = 25250$$

(b) $50500 \div 101$

$$125 \times 4 = 500$$

(c) 125×808

$$50500 \times 2 = 101000$$

(d) $50500 \div 25$

$$404 \times 5 = 2020$$

(e) 250×808

$$50500 \times 4 = 202000$$

5.

Use the fact that

$$140 \times 63 = 8820$$

to work out:

(a) 1400×63

$$8820 \times 10 = 88200$$

(b) 140×630

$$8820 \times 10 = 88200$$

(c) 1400×630

$$8820 \times 100 = 882000$$

(d) 14×63

$$8820 \div 10 = 882$$

(e) 14×6.3

$$8820 \div 100 = 88.2$$

6.

Use the fact that

$$77 \times 310 = 23870$$

to work out:

(a) 770×310

$$23870 \times 10 = 238700$$

(b) 7.7×31
 $\div 10 \div 10$

$$23870 \div 100 = 238.7$$

(c) 7700×31
 $\times 100 \div 10$

$$23870 \times 10 = 238700$$

(d) $23870 \div 770$

$$310 \div 10 = 31$$

(e) $23870 \div 31$

$$77 \times 10 = 770$$

7.

Use the fact that

$$226 \times 97 = 21922$$

to work out:

(a) 22600×97

$$21922 \times 100 = 2192200$$

(b) $21922 \div 22.6$

$$97 \times 10 = 970$$

(c) 2.26×970
 $\div 100 \times 10$

$$21922 \div 10 = 2192.2$$

(d) $219.22 \div 97$
 $\div 100$

$$226 \div 100 = 2.26$$

(e) $219220 \div 226$
 $\times 10$

$$97 \times 10 = 970$$

8.

Use the fact that

$$333 \times 121 = 40293$$

to work out:

(a) $402930 \div 3330$
 $\times 10 \div 10$

$$121$$

(b) 333×1.21
 $\div 100$

$$40293 \div 100 = 402.93$$

(c) $4029.3 \div 33.3$
 $\div 10 \times 10$

$$121$$

(d) $40.293 \div 12.1$
 $\div 1000 \times 10$

$$333 \div 100 = 3.33$$

(e) 3.33×1.21
 $\div 100 \div 100$

$$40293 \div 10000 = 4.0293$$

9.

Use the fact that

$$5713 \times 23 = 131399$$

to work out:

(a) 5713×0.23
 $\div 100.$

$$131399 \div 100 = 1313.99$$

(b) $13139.9 \div 230$
 $\div 10 \div 10$

$$5713 \div 100 = 57.13$$

(c) 57.13×23000
 $\div 100 \times 1000$

$$131399 \times 10 = 1313990$$

(d) $131.399 \div 2.3$
 $\div 1000 \times 10$

$$5713 \div 100 = 57.13$$

(e) 0.5713×23000
 $\div 10000 \times 1000$

$$131399 \div 10 = 13139.9$$

10.

Use the fact that

$$\frac{30940}{68} = 455$$

to work out:

(a) 455×68

$$30940$$

(b) $3094 \div 680$
 $\div 10 \div 10$

$$455 \div 100 = 4.55$$

(c) $3094 \div 0.68$
 $\div 10 \times 100$

$$455 \times 10 = 4550$$

(d) 45.5×6.8
 $\div 10 \div 10$

$$30940 \div 100 = 309.4$$

(e) $309.4 \div 455$
 $\div 100$

$$68 \div 100 = 0.68$$

11.

Use the fact that

$$679 \times 12 = 8148$$

to work out:

(a) 679×13

$$8148 + 679 = 8827$$

(b) 680×12

$$8148 + 12 = 8160$$

(c) 679×11

$$8148 - 679 = 7469$$

(d) 675×12

$$8148 - 4 \times 12 = 8100$$

(e) 679×14

$$8148 + 679 \times 2 = 9506$$

12.

Use the fact that

$$1911 \times 77 = 147147$$

to work out:

(a) 19110×0.77

$$\times 10 \div 100$$

$$147147 \div 10 = 14714.7$$

(b) 1912×77

$$147147 + 77 = 147224$$

(c) $147.147 \div 7.7$

$$\div 1000 \times 10$$

$$1911 \div 100 = 19.11$$

(d) 1911×78

$$147147 + 1911 = 149058$$

(e) $1471470 \div 191.1$

$$\times 10 \quad \times 10$$

$$77 \times 100 = 7700$$