



Digits and Divisibility - Intro

- 1 Each letter is a digit (0-9). What digit will be in the box with a question mark?

$$\begin{array}{r} \text{A}9 \\ \times \text{CD}1 \\ \hline \text{F} \text{G} \text{H} ? \end{array}$$

A	2	B	5	C	9
D	0	E	3	F	8

- 2 Each letter is a digit (0-9). Is the digit '0' possible in the box with a question mark?

$$\begin{array}{r} \text{A} \text{B} \\ \times \text{C} 0 \\ \hline \text{E} \text{F} \text{G} ? \end{array}$$

A	No
B	Yes

- 3 Each letter is a digit (0-9). Which digit is possible in the box with a question mark?

$$\begin{array}{r} \text{A}6 \\ \times \text{CDE} \\ \hline \text{F} \text{G} \text{H} ? \end{array}$$

A	1	B	7	C	5
D	8	E	3		

- 4 Each letter is a digit (0-9). Is the digit '6' possible in the box with a question mark?

$$\begin{array}{r} \text{A} \text{B} 9 \\ \times \text{D} ? \\ \hline \text{F} \text{G} \text{H} 4 \end{array}$$

A	Yes
B	No

- 5 Each letter is a digit (0-9). Which digit is possible in the box with a question mark?

$$\begin{array}{r} \text{A}5 \\ \times \text{C} ? \\ \hline \text{E} \text{F} \text{G} 0 \end{array}$$

A	7	B	0	C	9
D	5	E	3		

- 6 Is 317 a number that has a last digit that is 0

A	Yes
B	No

- 7 Is 2,312 a number that is an even number

A	Yes
B	No

- 8 Can 58 be divided by 1

$$58 \div 1$$

A	No
B	Yes



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9 Can 8,760 be divided by 3

8,760



3

A

Yes

B

No

10 Is 396 a number that is divisible by both 2 and 3

A

Yes

B

No

11 Is 4,512 a number that has three final digits that are divisible by 8

A

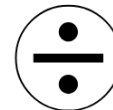
Yes

B

No

12 Can 250 be divided by 12

250



12

A

No

B

Yes

13 Can 25,358 be divided by 6

25,358



6

A

No

B

Yes

14 Find the ones digit when these numbers are multiplied

$$6 \times 6 \times 6$$

A

7

B

6

C

5

D

3

E

9

F

8

15 Find the ones digit when these numbers are multiplied

$$3 \times 3 \times 3 \times 3 \times 3$$

A

8

B

5

C

2

D

1

E

3

F

9

16 Find the ones digit when these numbers are multiplied

$$2 \times 2 \times 2 \times 2 \times 2 \times 2$$

A

3

B

1

C

4

D

6

E

2

F

5



Digits and Divisibility - Intro

17 Find the ones digit of this number

$$6^1$$

A	B	C
7	4	8
D	E	F
3	2	6

18 Find the ones digit of this number

$$9^4$$

A	B	C
9	8	3
D	E	F
5	4	1

19 Find the ones digit of this number

$$6^5$$

A	B	C
7	6	8
D	E	F
3	4	1

20 Find the ones digit when these numbers are multiplied

$$59 \times 59$$

A	B	C
4	1	9
D	E	F
2	0	6

21 Find the ones digit of this number

$$52^1$$

A	B	C
0	5	2
D	E	F
7	8	3

22 Find the ones digit when these numbers are multiplied

$$52 \times 52 \times 52$$

A	B	C
8	5	9
D	E	F
6	2	7

23 Find the ones digit when these numbers are multiplied
 $64 \times 64 \times 64 \times 64 \times 64 \times 64 \times 64 \times 64$

A	B	C
6	0	8
D	E	F
7	3	2

24 Find the ones digit of this number

$$97^4$$

A	B	C
5	9	6
D	E	F
7	1	2



Digits and Divisibility - Intro

25 Find the ones digit of this number

$$78^8$$

A	B	C
7	6	9
D	E	F
3	8	5

26 Find the ones digit of this number

$$9^{80}$$

A	B	C
6	9	1
D	E	F
8	7	2

27 Find the ones digit of this number

$$2^{35}$$

A	B	C
3	4	2
D	E	F
8	7	1

28 Find the ones digit of this number

$$7^{41}$$

A	B	C
7	3	5
D	E	F
4	0	2

29 Is 6 a factor of 105

A	B
Yes	No

30 Is 10 a factor of both 42 and 66?

A	B
Yes	No

31 Is b a factor of 30

A	B
Yes	No

32 Is y a factor of both 105 and 165?

A	B
Yes	No



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33 Is 18 a factor of 90

A

Yes

B

No

34 Is 70 a factor of both 330 and 390?

A

Yes

B

No

35 Is 4 a factor of 30

A

Yes

B

No

36 Is c a factor of 735

A

No

B

Yes

37 Is b a factor of both 150 and 350?

A

No

B

Yes

38 Is 21 a factor of both 70 and 154?

A

No

B

Yes

39 Is 28 a factor of 210

A

No

B

Yes

40 Is 105 a factor of both 210 and 1155?

A

Yes

B

No