Divisibility Rules

Divisible by:

Try these by using either short division or long division.

Is 348 divisible by 6?	Is 12,983 divisible by 3?	Is 99,028 divisible by 4?
348 ÷ 6	12,983 ÷ 3	99,028 ÷ 4

Yes or no?   Yes or no?   Yes or no?

The owner of a sporting goods store has $8,145 to give to his 9 employees as bonuses. Will each employee receive the same amount if he uses all of the money?

An M&M factory has 23,475,936 M&M's to donate for Halloween. If they have four states to donate to will each state receive the same amount of M&M's without any left over?

Divisible by 2:

Rule:

Which of the following are divisible by 2? Circle all that apply

23,468   18,340   3,455   513,008   18

Try These: Circle all of the numbers that are divisible by 2.

25   78   957   988   54,876   3,895   467

24,682,446,084,240,242,688,000,042,008,224,226,688,243

Divisible by 5:

Rule:

Which of the following are divisible by 5? Circle all that apply

23,465   18,340   3,452   513,059   55,552

Try These: Circle all of the numbers that are divisible by 5.

255   122   507   4,000   505,051   3,895   460

555,000,555,000,555,000,555,000,555,000,555,000,555,000,557

Divisible by 10:

Rule:

Which of the following are divisible by 10? Circle all that apply

10,104   34,905   3,450   500,008   18,004,950

Try These: Circle all of the numbers that are divisible by 10.

340   7,894   95,578   988,045   467,000   57,790   123,940

24,682,446,084,240,242,688,000,042,008,224,226,688,240

Divisible by 3:

Rule:

Which of the following are divisible by 3? Circle all that apply

111   12,976   67,431   200,001   18,001

Try These: Circle all of the numbers that are divisible by 3.

278   781   222,111   200,156   54,876   30,002   467,344

100,000,000,200,000,000,000,000,000,100,200,000

Divisible by 6:

Rule:

Which of the following are divisible by 6? Circle all that apply

234,965   341,028   35,992   562,500   18,006,003

Try These: Circle all of the numbers that are divisible by 6.

56,006   111,126   3,000   223,005   54,876   3,895

24,682,446,084,240,242,688,000,042,008,224,226,688,243

Divisible by 9:

Rule:

Which of the following are divisible by 9? Circle all that apply

105,003   919,191   569,250   999,882   18,783,392

Try These: Circle all of the numbers that are divisible by 9.

56,009,880   3,009,457,980   67,000   234,894   12,012

111,111,111,111,111,111,111,111,111,111,111,111

Divisible by 4:

Rule:

Which of the following are divisible by 4? Circle all that apply

444,444,423   556,712   456   67,000,001   78,050,436

Try These: Circle all of the numbers that are divisible by 4.

67,044   24,247   8,90,006   23,928   111,111

444,444,444,444,444,444,444,413

Divisible by 8:

Rule:

Which of the following are divisible by 8? Circle all that apply

456,056   345,006   234,960   124,245,128   25,001

Try These: Circle all of the numbers that are divisible by 8.

200,400   34,088   18,045,099   450,987   567,256   26,480

456,234,098,394,933,004,955,232,999,240

Now Try These:

The owner of a sporting goods store has $8,145 to give to his 9 employees as bonuses. Will each employee receive the same amount if he uses all of the money?

An M&M factory has 23,475,936 M&M's to donate for Halloween. If they have four states to donate to will each state receive the same amount of M&M's without any left over?

I have 24,902 word problems to put in 8 units. Will each unit get the same number of word problems if I use all of the problems?

I am writing a 256,938,093 word book. I have 6 years to complete it and want to write the same number of words per year. Is this possible?