

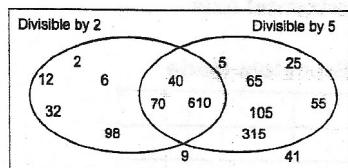
1.1

Patterns in Division



Quick Review

- Multiples of 2 are even numbers.
They have these ones digits: 0, 2, 4, 6, 8
For example, these are even numbers and multiples of 2: 32, 74, 88, 96, 100
All even numbers are divisible by 2.
- A number is a multiple of 4 if the tens and ones digits of the number form a number that is a multiple of 4.
For example, 124 is a multiple of 4 because 24 is a multiple of 4.
And, 3036 is a multiple of 4 because 36 is a multiple of 4.
- Multiples of 5 have these ones digits: 0, 5
For example, these numbers are multiples of 5: 5, 20, 45, 350
Multiples of 5 are divisible by 5.
- A number is a multiple of 8 if the hundreds, tens, and ones digits of the number form a number that is a multiple of 8.
For example, 1888 is a multiple of 8 because 888 is a multiple of 8.
And, 1040 is a multiple of 8 because 040, or 40 is a multiple of 8.
- Multiples of 10 have a ones digit that is 0.
For example, these numbers are multiples of 10: 20, 40, 130, 770
Multiples of 10 are divisible by 10.
- You can use a Venn diagram to show numbers that are divisible by two or more numbers.
This Venn diagram shows divisibility by 2 and by 5.



Multiples of 2 are in the left loop.

Multiples of both 2 and 5 are in the middle loop.

Multiples of 5 are in the right loop.

Numbers that are *not* multiples of 2 or of 5 are outside the loops.

Practice

1. Circle the numbers that are divisible by 2.

23 98 21 44 11 77 34

2. Circle the numbers that are divisible by 5.

55 10 7 59 105 775 1025

3. Circle the numbers that are divisible by 2 and by 5.

10 30 25 55 1000 52

HINT

The ones digits in numbers divisible by 2 are even.



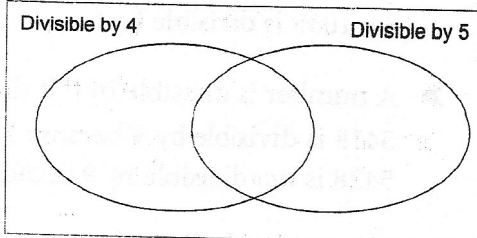
HINT

The ones digits in numbers divisible by 5 are 0 or 5.



4. Write each number in the correct place in the Venn diagram.

16, 20, 33, 64, 80, 95, 97, 105, 214, 216, 324, 405

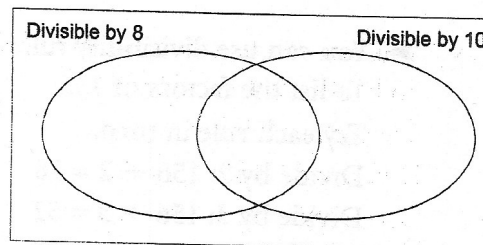


5. Write four 3-digit numbers that are divisible by 10.

6. Write three 4-digit numbers that are divisible by 8.

7. a) Write each number in the correct place in the Venn diagram.

115, 116, 120, 168, 450, 753, 800, 928, 1008, 1110



- b) Write 4 more numbers in the Venn diagram – one in each loop and one outside the loops. How do you know you placed each number correctly?
