

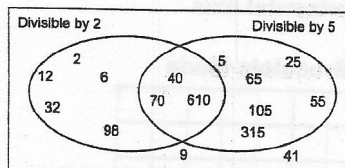
# 1.1

## 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.



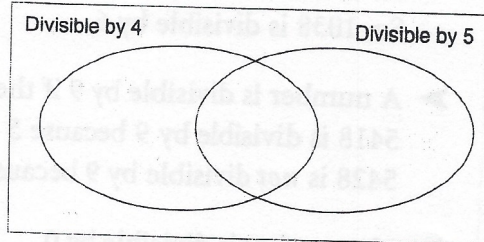
### HINT

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.

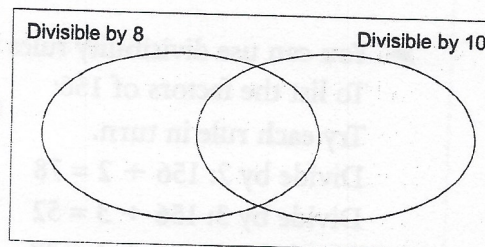
\_\_\_\_\_

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?

\_\_\_\_\_  
\_\_\_\_\_