



## CLASS NOTES-ANSWERS

### Exercise 3.1

1. Complete the table by checking whether the given number is divisible by 2, 3, 4, 5, 6, 8, 9 and 10. Tick ( $\checkmark$ ) if it is divisible and cross ( $\times$ ) if it is not divisible.

Answer:

Number	2	3	4	5	6	8	9	10
a. 1024	$\checkmark$	$\times$	$\checkmark$	$\times$	$\times$	$\checkmark$	$\times$	$\times$
b. 1827	$\times$	$\checkmark$	$\times$	$\times$	$\times$	$\times$	$\checkmark$	$\times$
c. 2836	$\checkmark$	$\times$	$\checkmark$	$\times$	$\times$	$\times$	$\times$	$\times$
d. 4865	$\times$	$\times$	$\times$	$\checkmark$	$\times$	$\times$	$\times$	$\times$
e. 7830	$\checkmark$	$\checkmark$	$\times$	$\checkmark$	$\checkmark$	$\times$	$\checkmark$	$\checkmark$
f. 8598	$\checkmark$	$\checkmark$	$\times$	$\times$	$\checkmark$	$\times$	$\times$	$\times$
g. 9350	$\checkmark$	$\times$	$\times$	$\checkmark$	$\times$	$\times$	$\times$	$\checkmark$

2. Replace # in the number 273# by the smallest possible digit so that the number formed is divisible by 11.

**Answer:** The smallest possible digit is 9 so that the number formed is divisible by 11. (Since  $2 + 3 = 5$  and  $7 + 9 = 16$ . Their difference is  $16 - 5 = 11$  is divisible by 11)

$\therefore$  2739 is divisible by 11.

3. Replace # in the number 738# by the smallest possible digit so that the number formed is divisible by 3 but not by 6.

**Answer:** The smallest possible digit is 3 so that the number formed is divisible by 3 but not by 6. (since  $7 + 3 + 8 + 3 = 21$ , is divisible by 3. but



7383 is not divisible by 2)

∴ The number is 7383.

4. Which of the following numbers are divisible by 2, 5 and 6?

- a. 1820                      b. 6435                      c. 3780                      d. 4332  
 e. 9680                      f. 8195                      g. 9960                      h. 3789

Answer:

Number	2	5	6
a. 1820	✓	✓	
b. 6435		✓	
c. 3780	✓	✓	✓
d. 4332	✓		✓
e. 9680	✓	✓	
f. 8195		✓	
g. 9960	✓	✓	✓
h. 3789			

(c) 3780 and (g) 9960 are both divisible by 2, 5 and 6.

5. Which of the following numbers are divisible by 3, 4 and 9?

- a. 4740                      b. 3648                      c. 7980                      d. 5893  
 e. 7612                      f. 7764                      g. 8394                      h. 8496

Answer:

Number	3	4	9
a. 4740	✓	✓	
b. 3648	✓	✓	
c. 7980	✓	✓	
d. 5893			
e. 7612		✓	



f. 7764	✓	✓	
g. 8394	✓		
h. 8496	✓	✓	✓

(h) 8496 is divisible by 3, 4 and 9.

6. Check if the number 4572 is divisible by both 4 and 8.

Answer:

4572 is divisible by 4 because the last two digits, 72 is divisible by 4 ( $72 \div 4 = 18$ ).

But 4572 is not divisible by 8 because the last three digits, 572 is not divisible by 8.

7. State whether the following statements are True or false.

- A number divisible by 10 is always even.
- A number divisible by 18 must be divisible by 2 and 9.
- A number divisible by 5 is always odd.
- A number divisible by 2, 3 and 6 must be divisible by 36.

Answer:

- True
- True
- False
- False