

Exercise 9c

1. Find which of the numbers is divisible by 2:

i) 352

ans- 352

= 2 is divisible by 2

Therefore, 352 is divisible by 2

ii) 523

ans- 523

= 3 is not divisible by 2

∴ 523 is not divisible by 2

iii) 496

ans- 496

= 6 is divisible by 2

∴ 496 is divisible by 2

iv) 649

ans- 649

= No

2. Find which of the following numbers divisible by 4.

i) 222

ans- 222

= No

iii) 678

ans- 678

= No

ii) 532

ans- 532

= Yes

iv) 9232

ans- 9232

= Yes

3. i) 324

ans - 324

= ~~Yes~~ No

ii) 2536

ans - 2536

= Yes

iii) 92760

ans - 92760

= Yes

iv) 444320

ans - 444320

= Yes

4. i) 221

ans - $2 + 2 + 1 = 5$

= No

ii) 543

ans - $5 + 4 + 3 = 12$

= Yes

iii) 28942

ans - $2 + 8 + 9 + 4 + 2 = 25$

= No

iv) 92349

ans - $9 + 2 + 3 + 4 + 9 = 27$

ans - Yes

5. i) 1882

$$\text{ans. } 1+8+8+2 = 9$$

= Yes

ii) 53247

$$\text{ans. } 5+3+2+4+7 = 21$$

ans. No

iii) 4968

$$\text{ans. } 4+9+6+8 = 27$$

= Yes

iv) 200314

$$\text{ans. } 2+0+0+3+1+4 = 10$$

= No

6. i) 324

$$\text{ans. } 324$$

$$= 3+2+4 = 9$$

= Yes

ii) 15505

$$\text{ans. } 15505$$

$$= 1+5+5+0+5 = 16$$

= No

iii) 2010

$$\text{ans. } 2010$$

$$= 2+0+1+0 = 3$$

= Yes

iv) 33278

$$\text{ans. } 33278$$

$$= 3+3+2+7+8 = 23$$

= No

7. i) 5080
 $= 5080 = \text{Yes}$

ii) 66066
 $= 66666 = \text{No}$

iii) 755
 $= 755 = \text{Yes}$

iv) 9207
 $= 92707 = \text{No}$

8. i) 9990
ans - $9990 = \text{Yes}$

ii) 0
ans - $0 = \text{Yes}$

iii) 847
 $= 847 = \text{No}$

iv) 8976
 $= 8976 = \text{No}$

9. i) 5918

$$\begin{aligned} \text{ans- } & 5 \textcircled{9} 1 \textcircled{8} \\ & = (9+8) \text{ and } - (1+5) \\ & = 17 - 6 \\ & = 11 \\ & = \text{Yes} \end{aligned}$$

ii) 68717

$$\begin{aligned} \text{ans- } & 6 \textcircled{8} 7 \textcircled{1} \textcircled{7} \\ & = (7+7+6) \text{ and } (1+8) \\ & = 20 - 9 \\ & = 11 \\ & = \text{Yes} \end{aligned}$$

iii) 3882

$$\begin{aligned} \text{ans- } & 3 \textcircled{8} 8 \textcircled{2} \\ & = (2+8) - (8+3) \\ & = 11 - 10 \\ & = 1 \\ & = \text{NO} \end{aligned}$$

iv) 10857

$$\begin{aligned} \text{ans- } & 1 \textcircled{0} 8 \textcircled{5} 7 \\ & = (7+8+1) - (5+0) \\ & = 16 - 5 \\ & = 11 \\ & = \text{Yes} \end{aligned}$$

10. i) 960

ans - 960

$$= 9 + 6 + 0 = 15$$

= Yes

ii) 8295

ans - 8295

$$= 8 + 2 + 9 + 5 = 24$$

= Yes

iii) 10243

ans - 10243

$$= 1 + 0 + 2 + 4 + 3 = 10$$

= No

iv) 5013

ans - 5013

$$= 5 + 0 + 1 + 3 = 9$$

= No

11. i) 64M3

ans - $6 + 4 + 3 = 13$

$$= 13 + 2 = 15$$

= 6423

ii) 46M46

ans - $4 + 6 + 4 + 6 = 20$

$$= 20 + 1 = 21$$

= 46146

ii) 27 M 53

$$\begin{aligned} \text{ans- } & 2 + 7 + 5 + 3 = 17 \\ & = 17 + 1 = 18 \\ & = 27153 \end{aligned}$$

12. i) 76 M 91

$$\begin{aligned} \text{ans- } & 7 + 6 + 9 + 1 = 23 \\ & = 23 + 4 = 27 \\ & = 76491 \end{aligned}$$

ii) 77548M

$$\begin{aligned} \text{ans} = & 7 + 7 + 5 + 4 + 8 = 31 \\ & = 31 + 5 = 36 \\ & = 775485 \end{aligned}$$

iii) 627M9

$$\begin{aligned} \text{ans- } & 6 + 2 + 7 + 9 = 24 \\ & = 24 + 3 = 27 \\ & = 62739 \end{aligned}$$

13. i) 39 M 2

$$\begin{aligned} & = 3 \textcircled{9} \text{M} \textcircled{2} \\ & = 2 + 9 = 11 \\ & = 3 + 8 = 11 \\ & = 11 - 11 = 0 \\ & = 3982 \end{aligned}$$

ii) 3 M 422

$$\begin{aligned} & = 3 \textcircled{M} \textcircled{4} \textcircled{2} \textcircled{2} \\ & = 2 + 4 + 3 = 9 \\ & = 2 + 7 = 9 \\ & = 9 - 9 = 0 \\ & = 37422 \end{aligned}$$

iii) 70975 M

$$\begin{aligned} \text{ans- } & 7 \textcircled{0} \textcircled{9} \textcircled{7} \textcircled{5} \text{M} \\ & = 5 + 9 + 7 = 21 \\ & = 7 + 3 = 10 \\ & = 21 - 10 = 11 \\ & = 709753 \end{aligned}$$

iv) 14 M 75

$$\begin{aligned} \text{ans- } & 1 \textcircled{4} \text{M} \textcircled{7} \textcircled{5} \\ & = 7 + 4 = 11 \\ & = 5 + 1 + 5 = 11 \\ & = 11 - 11 = 0 \\ & = 14575 \end{aligned}$$

14. State true or false :

i) If a number is divisible by 4 it is divisible by 8. False

ii) If a number is factor of 16 and 24, it is a factor of 48. True.

iii) If a number is divisible by 18, it is divisible by 3 and 6. True

iv) If a divides both b and c completely, then a divides $a+b$ and $a-b$ also completely. True.