

Ex 5(D)

1. $1x5$ divisible by 3?

$$2 \quad 1+x+5=3$$

$$6+x=3$$

$$x=3, -6, -3 \quad \text{No}$$

$$x=3, 6, 9$$

2. $31x5$ divisible by 3?

$$2 \quad 3+1+x+5=3$$

$$10+x=3$$

$$x=3-10=-7 \quad \text{No} \quad x=3, 6, 9$$

$$2 \quad 3+1+1+5=3$$

$$10=3 \quad \text{No}$$

$$2 \quad 3+1+2+5=3$$

$$2 \quad 11=3 \quad \text{No}$$

$$2 \quad 3+1+3+5=3$$

$$2 \quad 12=3, \text{ Yes}$$

$$2 \quad 3+1+4+5=3$$

$$2 \quad 14=3 \quad \text{No}$$

$$2 \quad 3+1+6+5$$

$$15=3, \text{ Yes}$$

$$2 \quad 3+1+9+5=3$$

$$18=3 \quad \text{Yes}$$

3. $28x6$ a multiple of 3

$$2 \quad 2+8+x+6=3$$

$$16+x=3$$

$$2 \quad 2+8+1+6=3$$

$$17=3, \text{ No}$$

$$2 \quad 2+8+2+6=3$$

$$18=3 \quad \text{Yes}$$

$$x=2, 5, 8$$

$$2 \quad 2+8+4+6=3$$

$$20=3 \quad \text{No}$$

$$2 \quad 2+8+5+6=3$$

$$21=3 \quad \text{Yes}$$

$$2 \quad 2+8+8+6=3$$

$$224=3$$

$$\text{Yes}$$

4. $24x$ divisible by 6?

$$2 \quad 2+4+x=6$$

$$6+x=6$$

$$x=0, 6, 12$$

$$x=6-6=0$$

$$2 \quad 2+4+1=6$$

$$x=67x$$

$$2+4+5=11x$$

$$2+4+2=8x$$

$$2+4+6=12x$$

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

$$2+4+4=10x$$

5. $3x26$ a multiple of 6?

A) $x = 1, 7$

6. $42x8$ divisible by 4?

A) $4+2+x+8 = 4 \quad x = 2, 6$

A) $4+2+1+8 = 15, \text{ NO}$

$4+2+2+8 = 16, \text{ Yes}$

$4+2+3+8 = 17$

$4+2+4+8 = 18, \text{ Yes}$

7) $9142x0$ multiply of 4?

$9+1+4+2+x = 4 \quad x = 4, 8$

A) $9+1+4+2+1 = 17 \quad 9+1+4+2+5 = 21$

$9+1+4+2+2 = 18 \quad 9+1+4+2+6 = 22$

$9+1+4+2+3 = 19 \quad 9+1+4+2+7 = 23$

$9+1+4+2+4 = 20, \text{ Yes} \quad 9+1+4+2+8 = 24, \text{ Yes}$

8) $7x34$ divisible by 9?

A) $x = 4$

9) $5x56$ a multiple of 9?

A) $x = 7$

10) $3x2$ divisible by 11?

A) 3×2

Sum of odd counting numbers $= 3+2 = 5$

Sum of even counting no $= x$

$x = 5$

11) $5x2$ a multiple of 11?

A) 5×2

odd $= 2+5 = 7$

even $= x \quad \text{So, } x = 7$