



10) a) steps jumped in first 2 jumps

$$= 3 + (-2)$$

$$= 1 \text{ [on II Step]}$$

steps jumped in first 10 jumps

$$= 1 \times 5$$

$$= 5 \text{ [on VI step]}$$

no. of steps jumped in 11 jumps

$$= 6 + 3$$

$$= 9 \text{ [1x step at water level]}$$

b) steps covered in first 2 jumps = $4 + (-2)$

$$= 2 \text{ [VII Step]}$$

steps covered in next 2 jumps = $4 + (-2)$

$$= 2$$

$$\text{[V step]}$$

no. of steps jumped in next jump

$$= 4 + 5$$

$$= 9$$

[I step]

c) $-3 + 2 + (-3) + 2 + (-3) + 2 + (-3) + 2 + (-3) + 2 + (-3)$

$$= -18 + 10$$

$$= -8$$

[reaches water level]

$$4 - 2 + 4 - 2 + 4$$

$$= 12 - 4$$

$$= 8$$

[reaches first step]