

Problem to try part 2.

$$\text{Average :- } \frac{\sum x_i}{i}$$

Average of 16, 4, 8, 12

$$\Rightarrow \frac{16 + 4 + 8 + 12}{4} = \frac{40}{4} = 10$$

Average 6 weeks = 10 hr

1<sup>st</sup> week = 8 hr

2<sup>nd</sup> week = 11

3<sup>rd</sup> week = 7

4<sup>th</sup> week = ~~8~~ 12

5<sup>th</sup> week = 10

6<sup>th</sup> week =  $x$

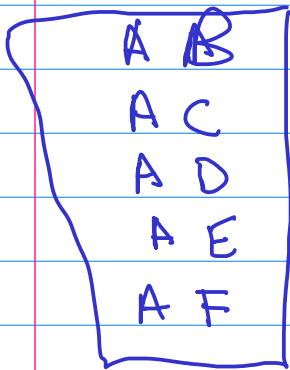
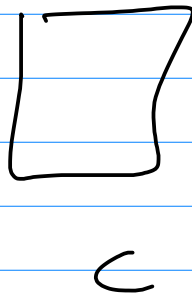
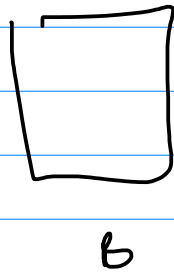
$$\frac{8 + 11 + 7 + 12 + 10 + x}{6}$$

$$= 10$$

$$\Rightarrow \frac{48 + x}{6} = 10$$

$$\Rightarrow 48 + x = 10 \times 6$$
$$\Rightarrow 48 + x = 60$$
$$\Rightarrow x = 12$$

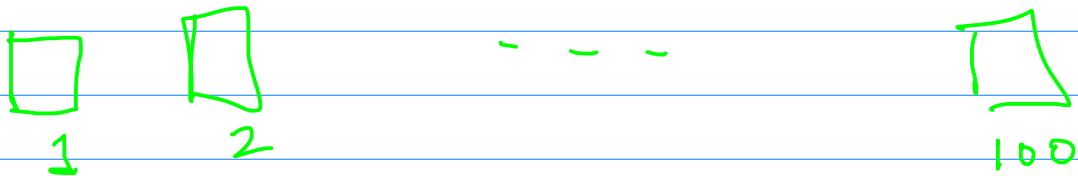
2'



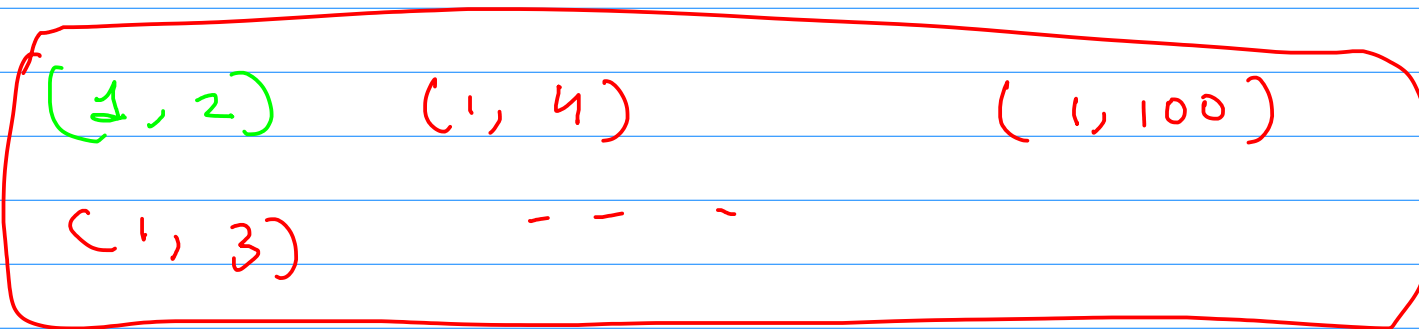
$$5 \times 6 = 30$$

5

Q. Haunted house has 100 windows, ghost enters through 1 window leaves through a different window. How many ways can he do that



Q1



$(2, 1), (2, 3) \dots, (2, 100)$

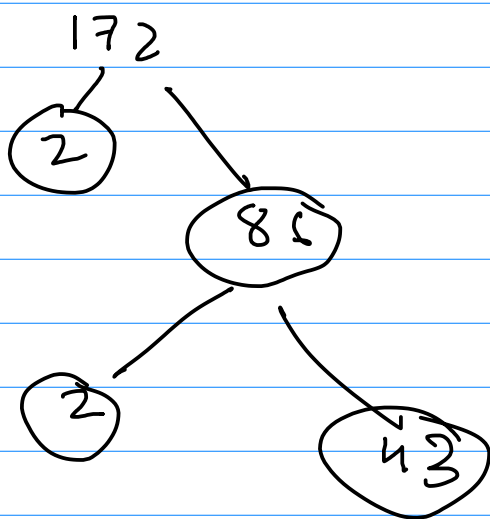
$(100, 1), (100, 2), (100, 3) \dots, (100, 99)$

$$99 \times 100 = 9900$$

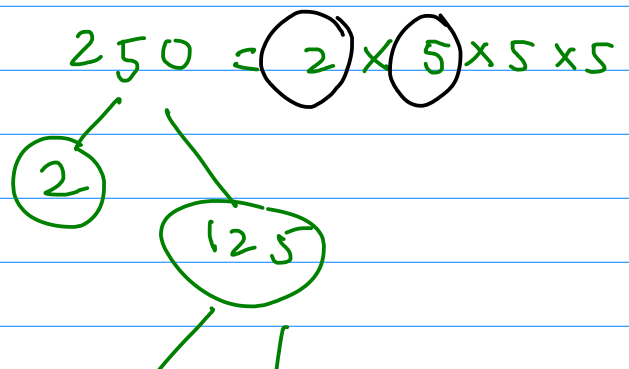
3. Factors of 172

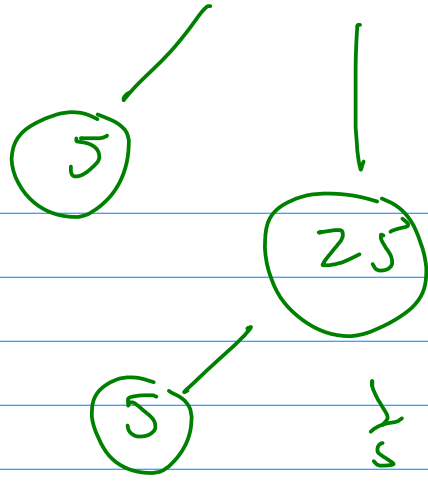
are numbers which divides 172.

$1, 2, 4, \dots$



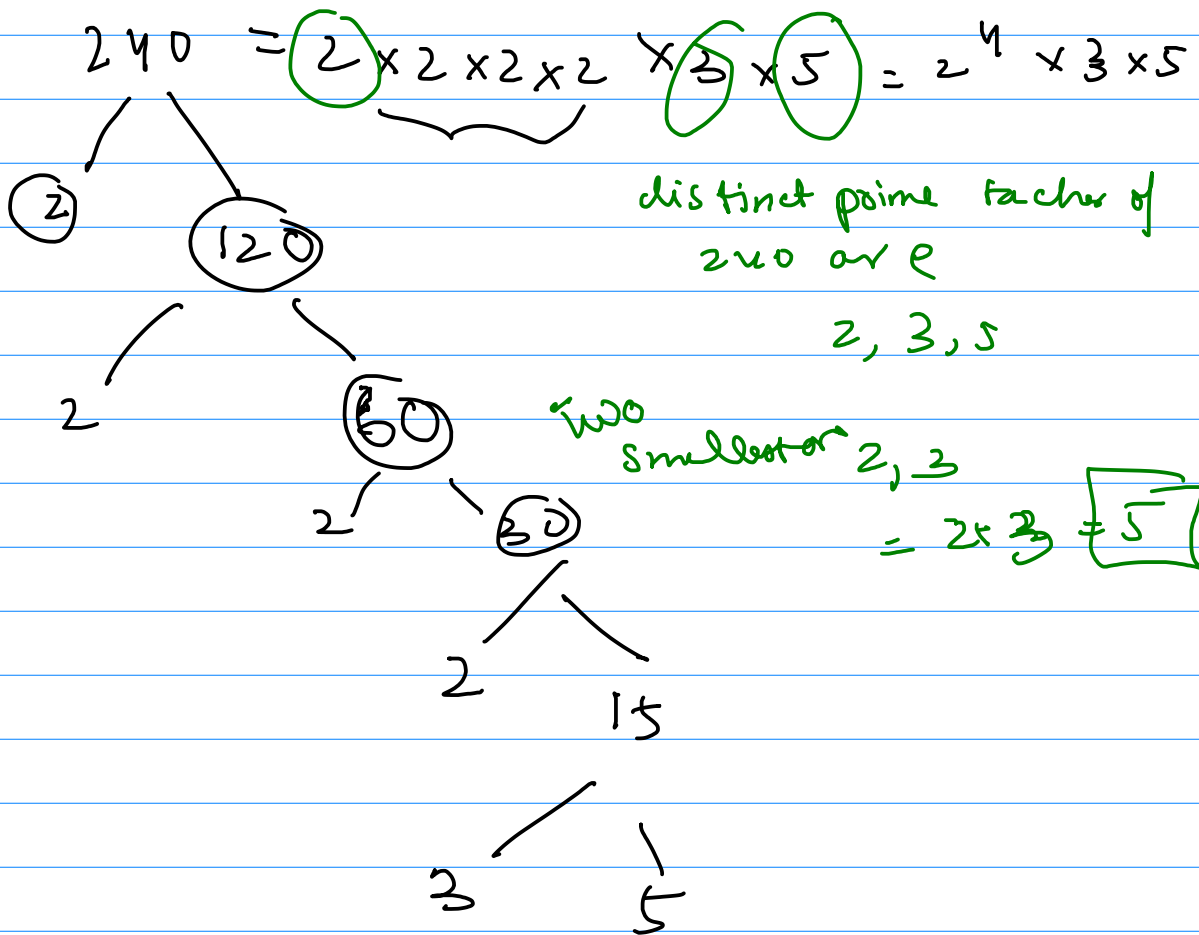
$$172 = 2 \times 2 \times 43$$





Ans =  $2 + 5 = 7$

Q. Sum of the <sup>distinct.</sup> 2 smallest prime factor of 240.



h. Age of 1st person = 18

2nd person = a

3rd = b

4th = c

5th = d

$$\frac{a+b+c+d+18}{5} = 30$$

$$\Rightarrow a+b+c+d+18 = 30 \times 5 = 150$$

$$\Rightarrow a+b+c+d = 150 - 18 = 132$$


$$\frac{a+b+c+d}{4} = \frac{132}{4} = 33$$

5.



$$\boxed{11} = 1 + 11 = 12$$

$$\boxed{12} = 1 + 2 + 3 + 4 + 6 + 12$$
$$= 28$$

  $\rightarrow$  11's factor is 1 and 11

$\rightarrow$  factors of 12  
you have to add it

$$\boxed{12} = 1 + 2 + 3 + 4 + 6 + 12$$
$$= 28$$