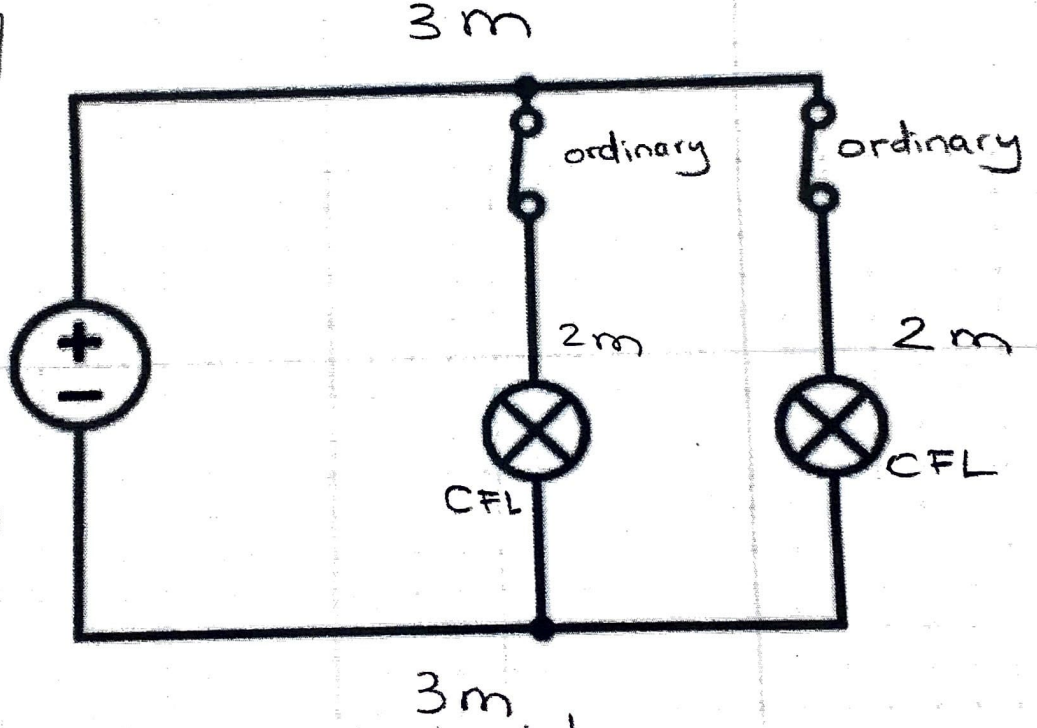
Bathroom

* perimeter = 12 m of wires = 12 Jds
  2 x CFL = 2 x 1 = 2 Jds
  2 x ordinary = 2 x 0.5 = 1 Jds
  total cost = 15 Jds



* The power
  time / day = 1 hour
  per month = 30 hours.
  power = 20W

E = power(kW) x time(h)
E = 0.02 kW x 1 h
Energy = 0.02 kWh
Energy for 2 Lamps = 0.02 x 2 = 0.04 kWh / day
E = 0.04 x 30 = 1.2 kWh / month.

Bedroom

CFL

* for ~~Encandered~~.

ime used = 8 hrs

er month = 240h

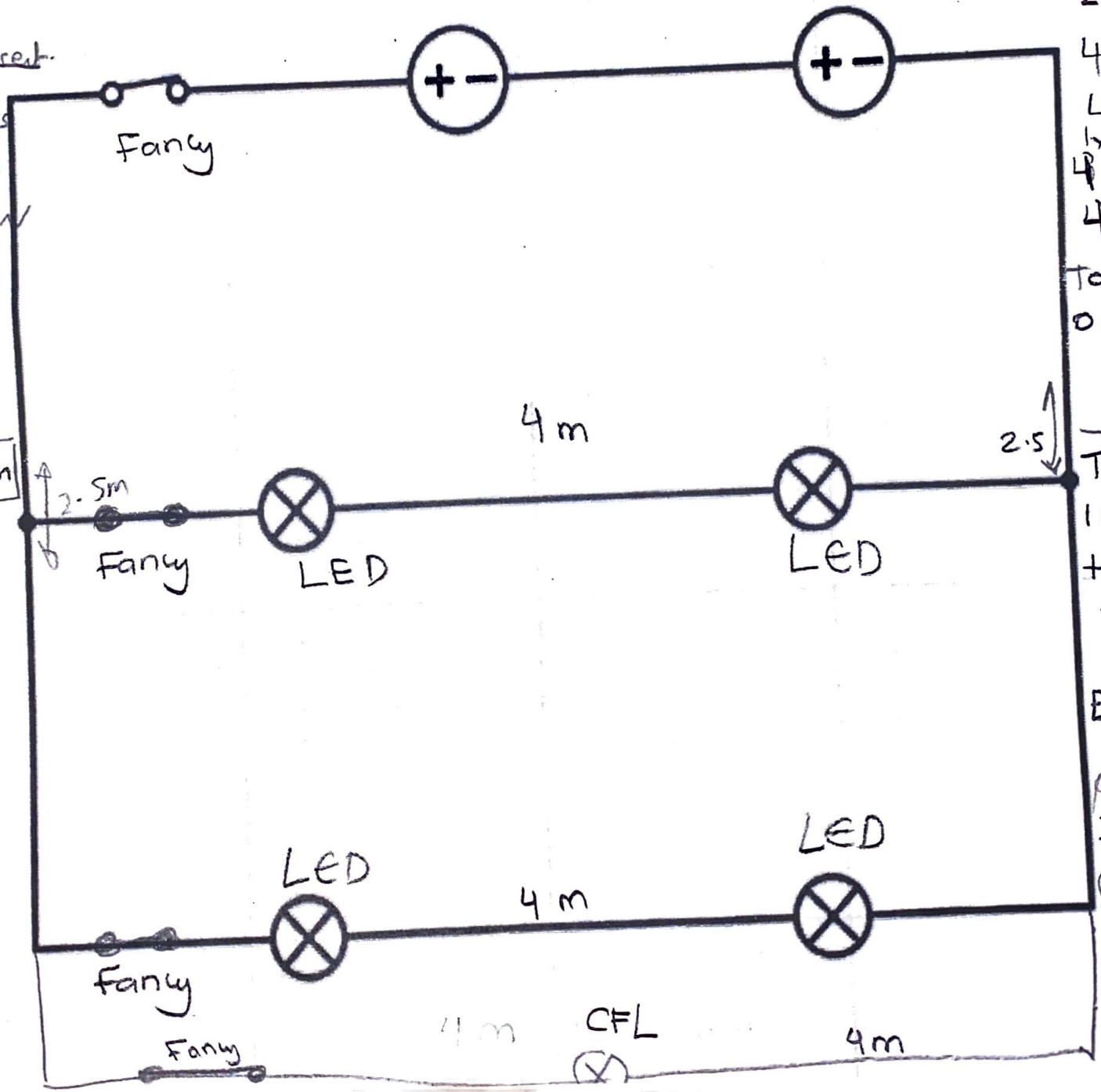
he power = 20w

:= 0.02 X 8

:= 0.16 kwh

= 0.16 x 30

:= 4.8 kwh per month.



4 + 4 + 4 + 4 + 2.5 + 2.5 =

21 m of wire

21 X 1 = 21 JD

4 X LED =

4 X 1.5 = 6 JD

1 x 0.5 = 0.5 JD

4 X Fany Switch

4 X 0.75 = 3 JD

Total = 21 + 6 + 0.5 + 3 = 30.5

The power :

1 LED = 14 W

time used / LED = 2 hours per month = 60

E = 0.014 X 2 = 0.028 per day

per month: 0.028 x 30 = 0.84 Kwh/month

0.84 x 4 = 3.36 Kwh per month

* perimeter = 18 m of wire = 18 jds

* 1 LED = 1.5 Jd

* 7 CFL = 7 x 1 = 7 Jd

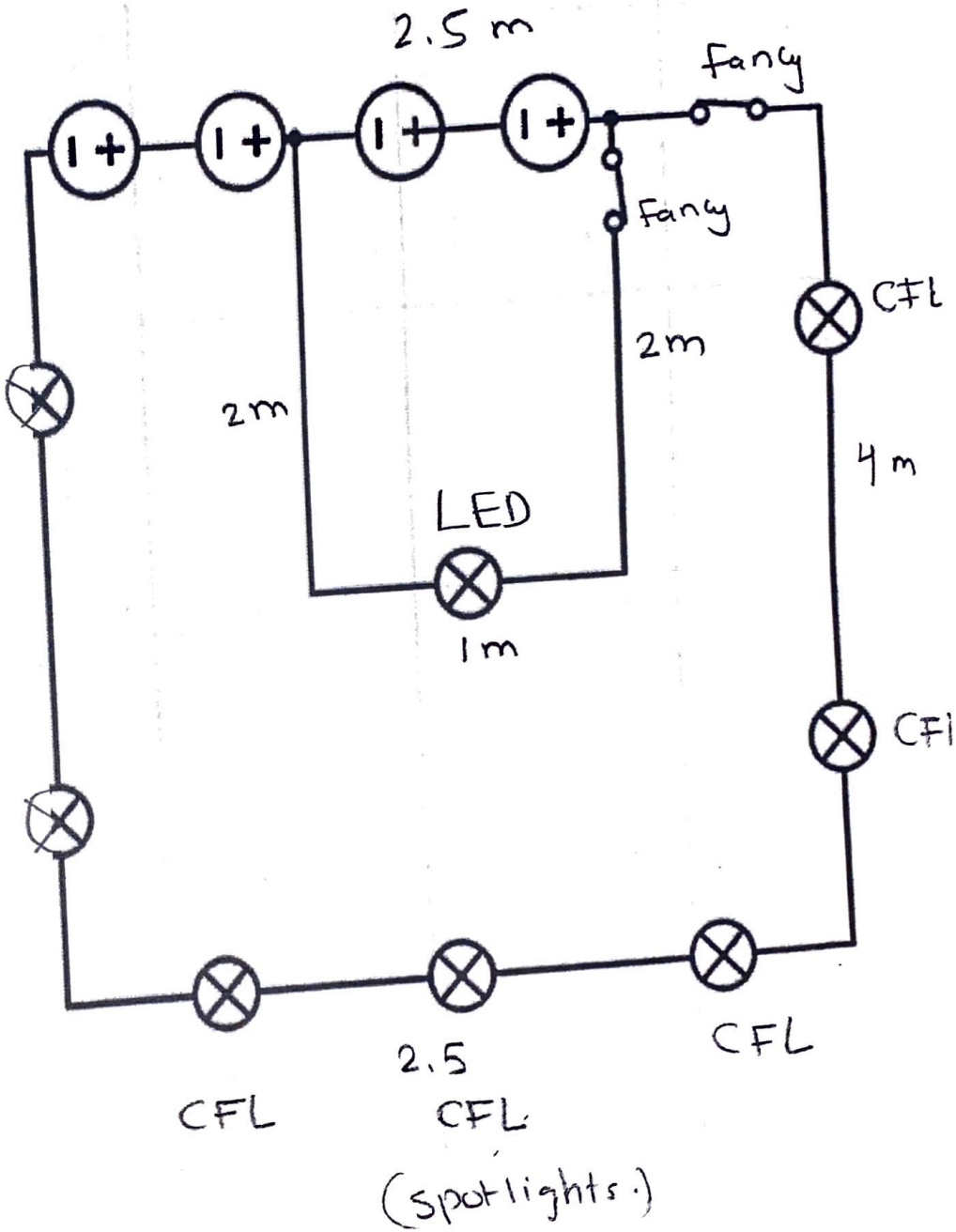
* 2 Fany switch = 2 x 0.75 = 1.5 Jds

total cost = 28 jds

CFL
Time = 2 h / day
The power: 20 w
= = 0.02 x 2
= 0.04 kwh / day
= = 0.04 x 30 = 1.2 kwh/month
= = 1.2 x 7 = 8.4 kwh/month +

LED
Time = 4 hrs
power = 14 w
E = 0.014 x 4 = 0.056
0.056 x 1 = 0.056
0.056 x 30 = 1.68 KWh/month

Kitchen



The total cost of all circuits = 30.5 + 36.5 + 15 + 28 = (110 Jds.

Total Energy used per month.

15.12 + 1.2 + 4.8 + 3.36 + 8.4 + 1.68 =

34.56 KWh / month.

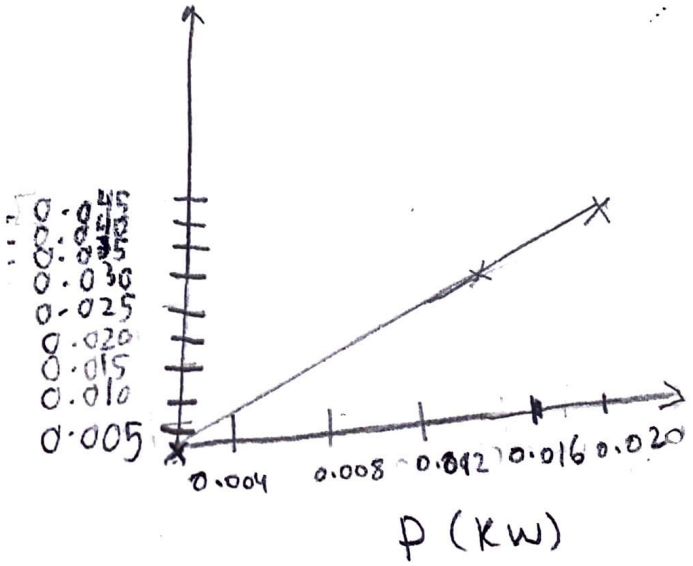
Electrical bill (monthly)

34.56 X0.12 = 4.1472 + 5 = 9.1472 Jds

* The 2 variables that directly proportional.

power + Energy

	P x_1	E y_1
LED	0.014 KW ,	0.028 KWh
CFL	0.020KW x_2 ,	0.040 KWh y_2

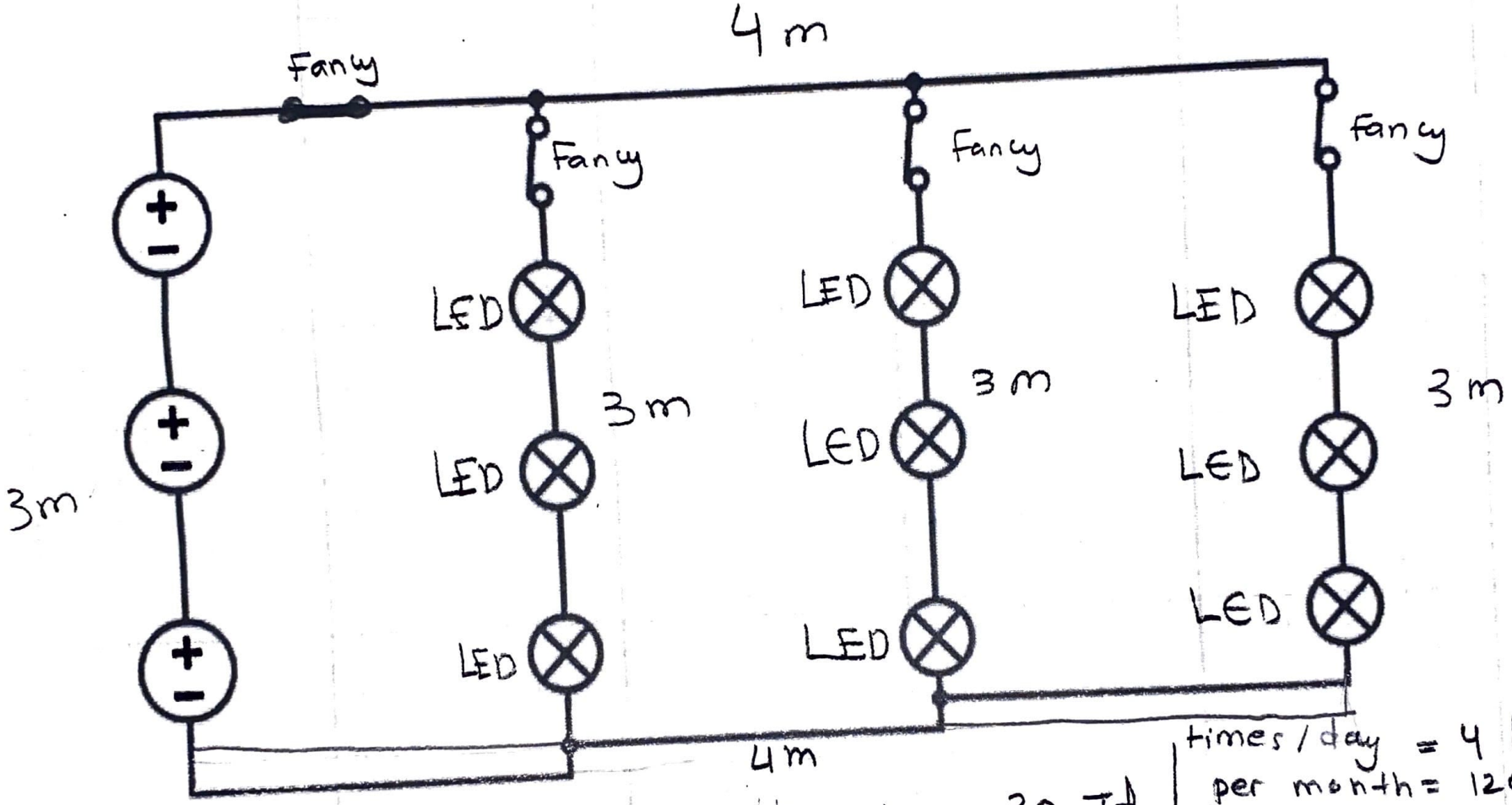


$E \pm P \times T$

when p is zero

the E is zero

Living room:



perimeter = 20 m of wires 20 x 1 = 20 Jd

9 x LED = 9 x 1.5 = 13.5 Jd

4 x Fany switch = 4 x 0.75 = 3 Jd

total = 36.50 Jd

times / day = 4 hrs

per month = 120 hrs

E = 0.014 x 4

E = 0.056 KWh

E = 0.056 x 30

= 1.68 kwh x 9

E = 15.12 KWh / month