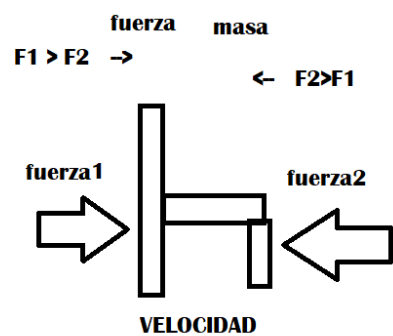
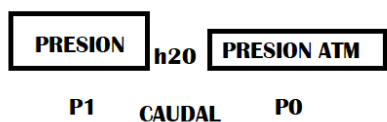
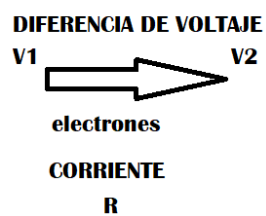
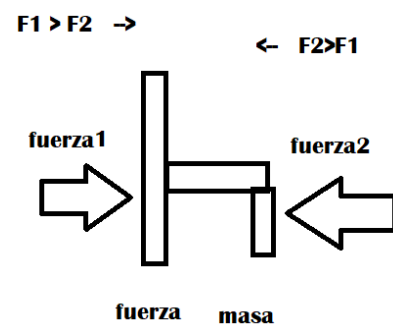
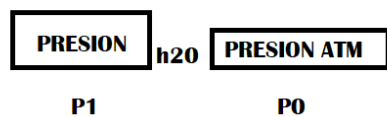
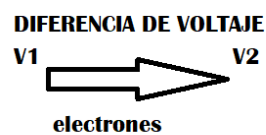
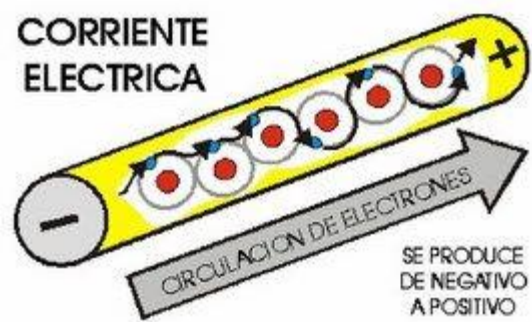
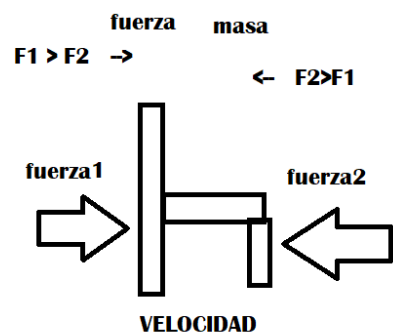
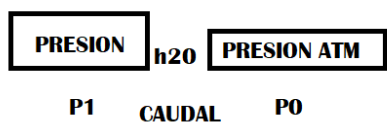
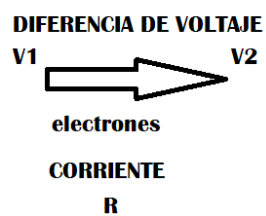


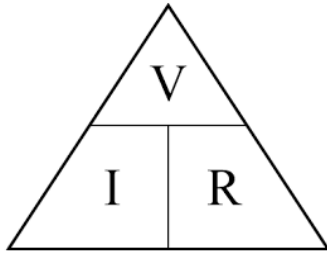
Corriente

agua circulación de H2O

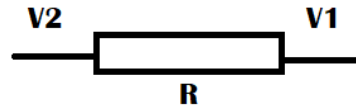


LEY DE OHM

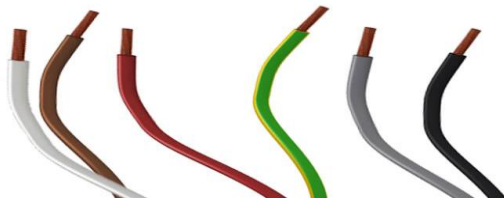




$$I = \frac{V_2 - V_1}{R}$$



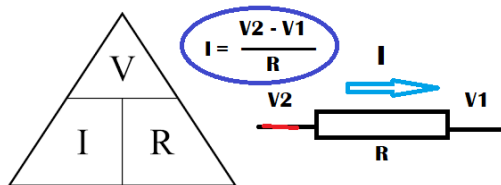
CABLES



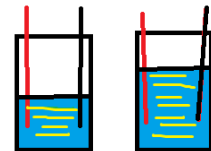
ESPECIFICACIONES CORRIENTE QUE PASAR POR AHÍ

CALIBRE DEL CABLE ENTRE MENOS SEA EL NUMERO

AWG	Dia mm	SWG	Dia mm	Max Amps	Ohms / 100 m
11	2.30	13	2.34	12	0.47
12	2.05	14	2.03	9.3	0.67
13	1.83	15	1.83	7.4	0.85
14	1.63	16	1.63	5.9	1.07
15	1.45	17	1.42	4.7	1.35
16	1.29	18	1.219	3.7	1.48
18	1.024	19	1.016	2.3	2.04
19	0.912	20	0.914	1.8	2.6
20	0.812	21	0.813	1.5	3.5
21	0.723	22	0.711	1.2	4.3
22	0.644	23	0.610	0.92	5.6
23	0.573	24	0.559	0.729	7.0
24	0.511	25	0.508	0.577	8.7
25	0.455	26	0.457	0.457	10.5
26	0.405	27	0.417	0.361	13.0
27	0.361	28	0.376	0.288	15.5
28	0.321	30	0.315	0.226	22.1
29	0.286	32	0.274	0.182	29.2
30	0.255	33	0.254	0.142	34.7
31	0.226	34	0.234	0.113	40.2
32	0.203	36	0.193	0.091	58.9
33	0.180	37	0.173	0.072	76.7
34	0.160	38	0.152	0.056	94.5
35	0.142	39	0.132	0.044	121.2

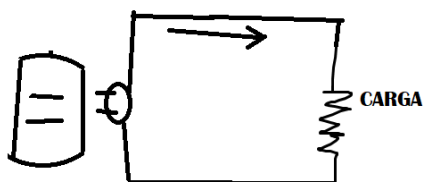


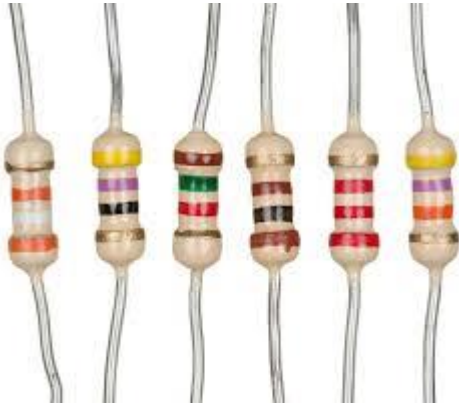
RESISTENCIA
CABLES



R MENOR

$$R = \frac{P \cdot L}{A}$$





K=KILO M=MEGA G=GIGA T =TERA

ROJO – VERDE – AMARILLO – DORADO

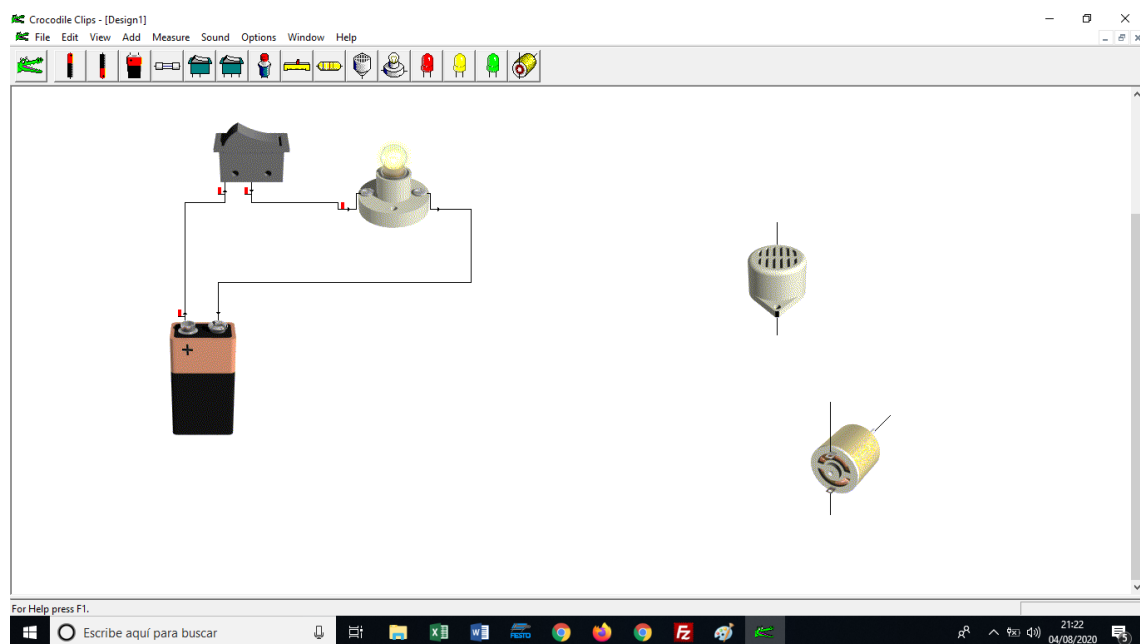
2 5 0000(4) +/-5% 250.000 OHM +/- 12.500 (237.500 – 262.500)
250KOhm

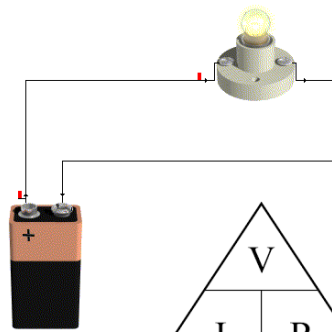
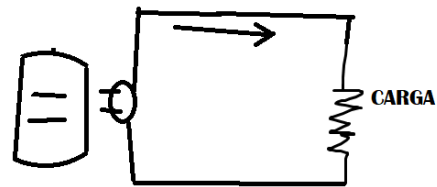
BLANCO - GRIS - AZUL - PLATEADO

9 8 000000(6) +/-10% 98.000.000 +/- 9.8M (88.2M - 107.8M)
=98MOhm

ROJO NARANJA AMARILLO NEGRO ROJO

2 3 4 (0) +/- 2% 234ohm +/- 2%

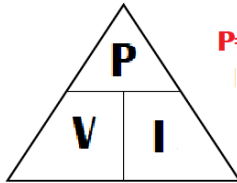




$$I = \frac{V}{R} \text{ AMPERIOS } A$$

$$V = I \cdot R \text{ voltios } v$$

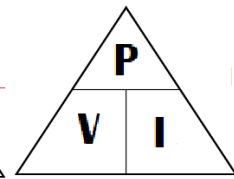
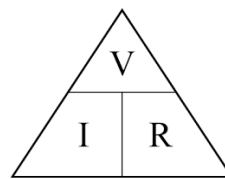
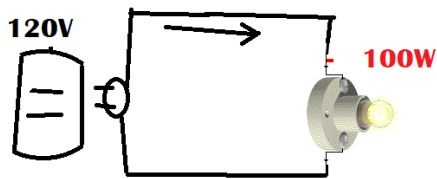
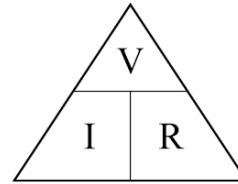
$$R = \frac{V}{I} \text{ Ohmios } \Omega$$



$$P = V \cdot I$$

$$V = \frac{P}{I}$$

$$I = \frac{P}{V}$$



$$P = 100W$$

$$V = 120V$$

$$I =$$

$$R = 120V / I$$

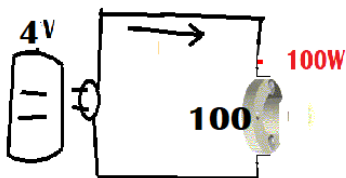
$$100 / 120 A$$

$$= 0,83A$$

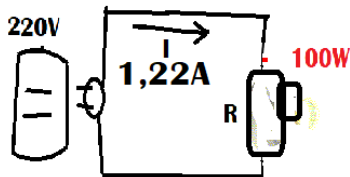
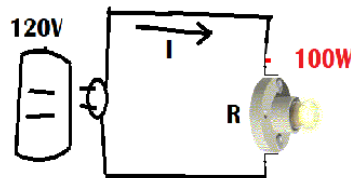
EN 5 HORAS CUANTO

CONSUME I=?

$$0,83 \times 5 = 4A$$

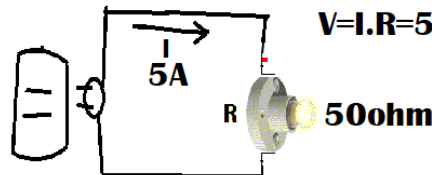


$$I = V / R = 4 / 100 = 0,04A = 40mA$$



$$R = V / I = 220 / 1,22$$

$$P = V \cdot I = 220 \times 1,22$$



$$V = I \cdot R = 5A \cdot 50ohm = 250V$$

$$P = V \cdot I = 250 \cdot 5 =$$

$$1250WATTS =$$

$$1250VATIOS$$

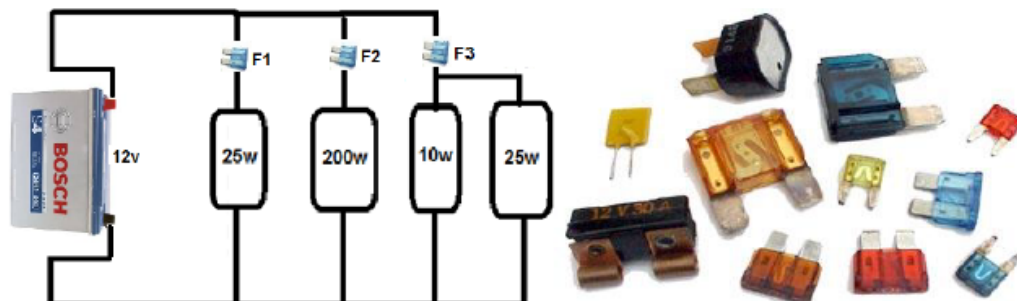
Para el siguiente circuito encuentre:

- Cual es la resistencia de cada elemento en el circuito.
- Calcule el valor optimo del taco que maneje la corriente de la linea y que proteje contra sobre carga.
- Si codensa cobra a \$1000 1kwh, cuanto costaran 2 horas si todas las cargas estan trabajando?



Para el siguiente circuito encuentre:

- Calcule el valor optimo del fusible que proteje cada circuito. F1, F2, F3
- Cual es la resistencia de cada elemento en el circuito.
- Si la bateria esta especificada de 30A, cuanto tiempo demorara en descargarse, si todas las cargas estan trabajando?
- Calcule la potencia entregada por la fuente



Fusibles para vehículos.

En los fusibles para vehículos normalmente viene indicado en el manual de entretenimiento del coche cuales son los amperajes que deben ir en cada circuito no obstante el amperaje se indica mediante un código de colores:

Marrón = 5A; Rojo = 10A; Azul = 15 A; Amarillo = 20A; Incoloro = 25A; Verde = 30A

Circuitos