

M R

Ahmed Mahdy



استاتيكا	فيزياء
الكترونياات	دوائر كهربية
هيدروليكا	ميكانيكا الانشآت

مدرس خصوصي

حضورى

اونلاين

بحصل الطالب علي

مقاطع فيديوات لشرح المقرر بشكل وافى

ملخص للمادة Pdf للمذكرة واطراجة

محاضرات مباشرة علي برنامج زووم

مناقشة الأجزاء الغير مفهومة

تواصل مستمر مع معلم المادة



للواصل

0567630097

0565657741

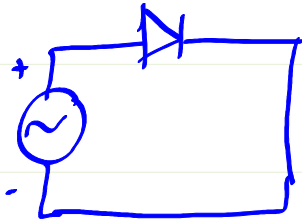
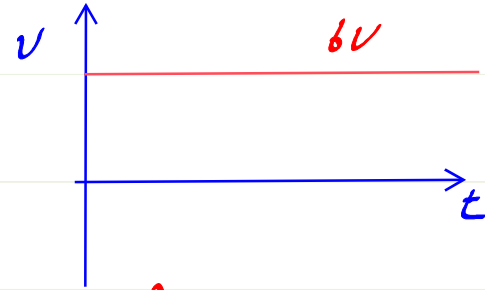
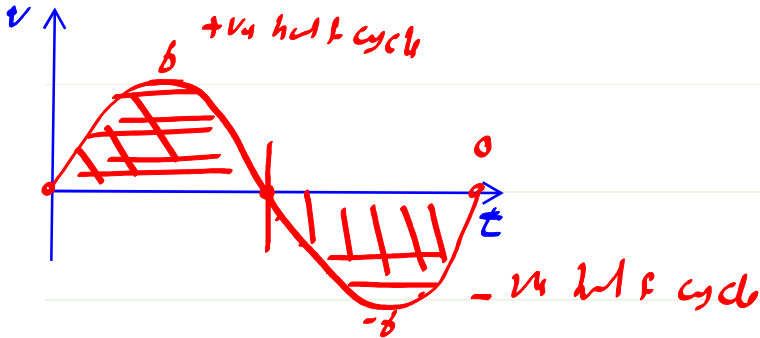
شبه
Source

شبه
6V

6V sinoidal

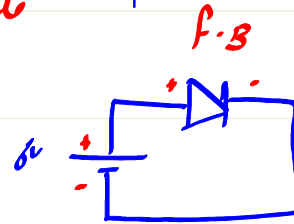
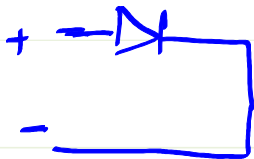
شبه
6V

6V

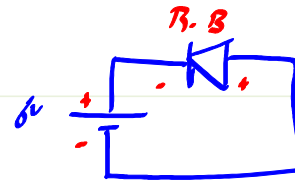


$+ 6V$ half cycle

F.B



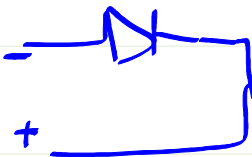
F.B



R.B

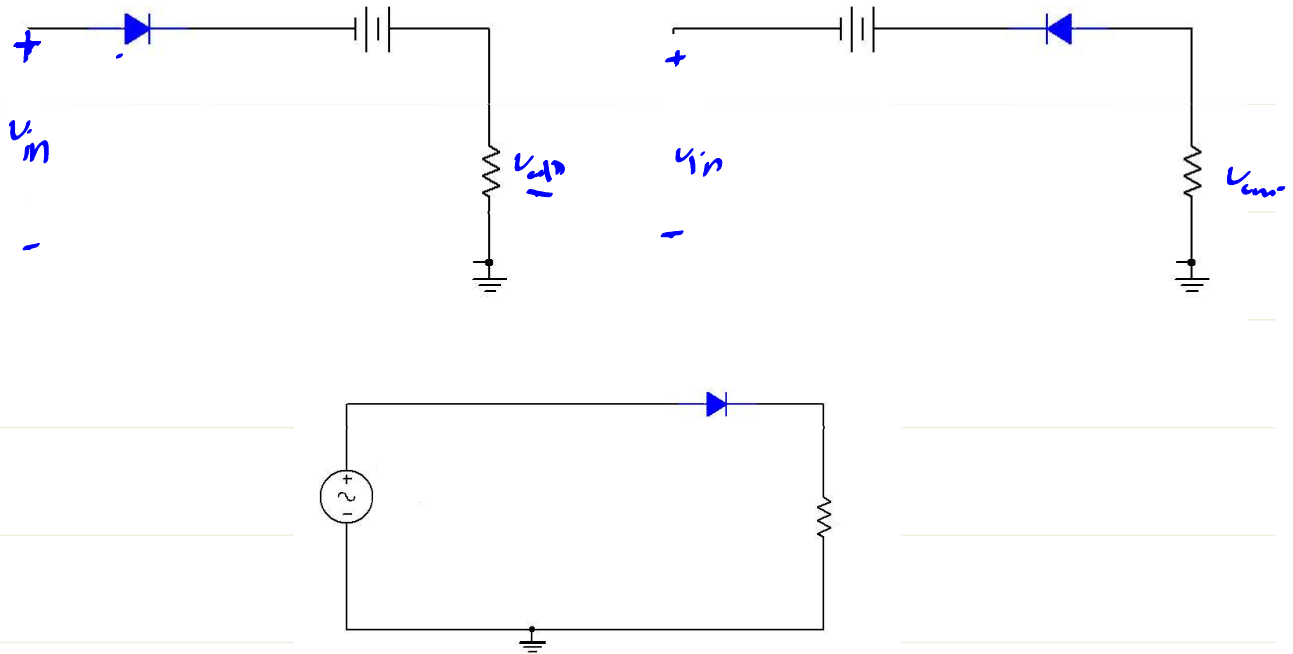
$- 6V$ half cycle

R.B



Clippers

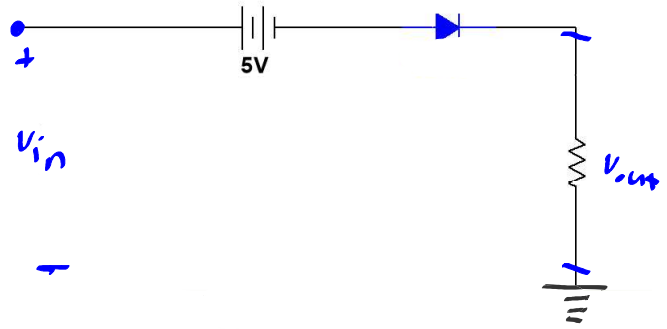
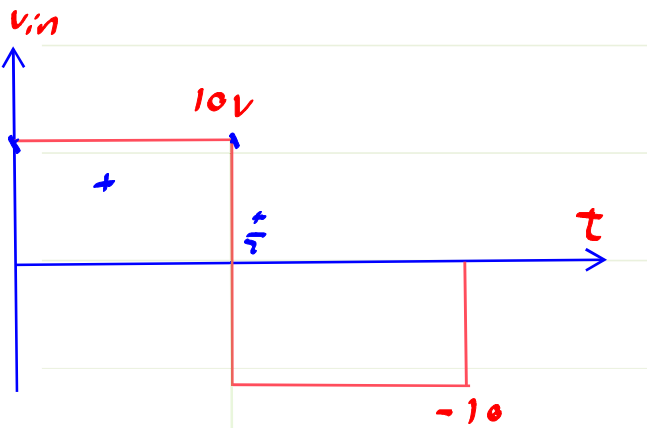
a) Series, the diode in series with loads



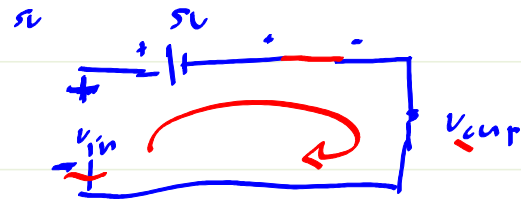
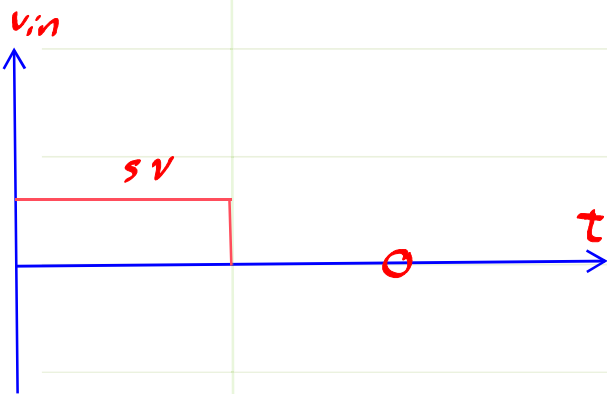
b) Parallel: the diode is in branch parallel to the load



Ex



+ v_d half cycle



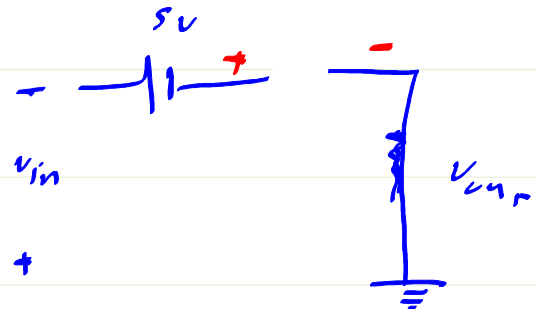
$$v_{in} = 10V$$

$$V_{dc} = 5V$$

diode \Rightarrow f.B

$$-10 + 5 + v_{out} = 0 \Rightarrow v_{out} = 5V$$

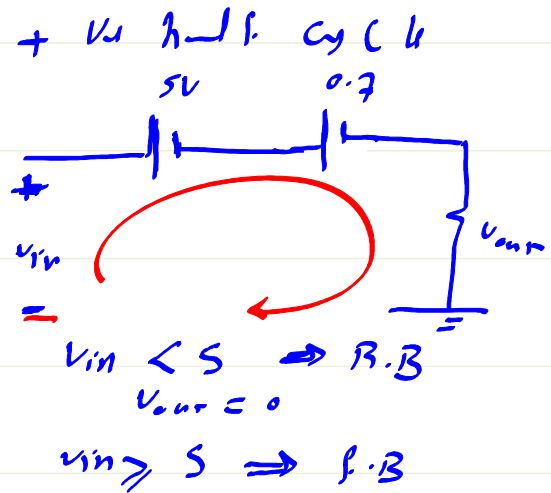
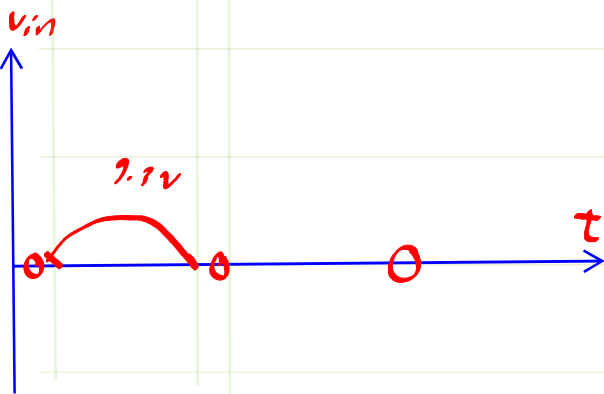
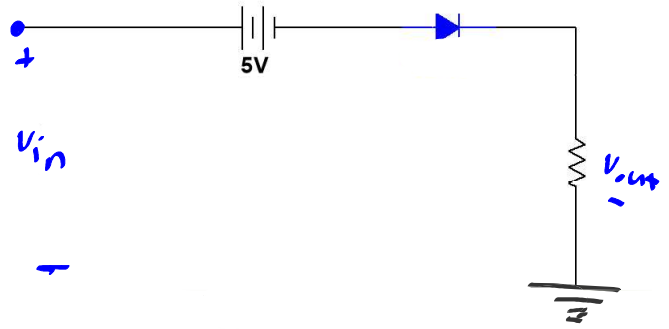
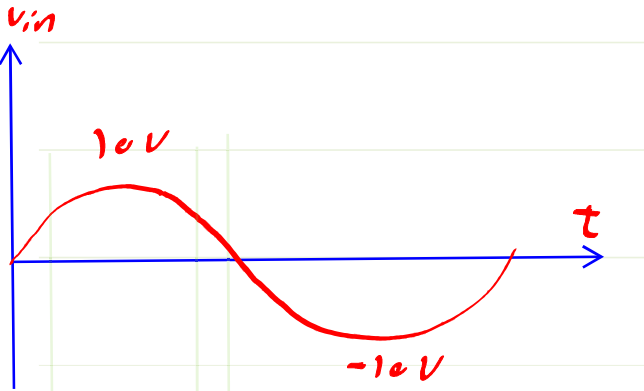
- v_d half cycle



diode R.B

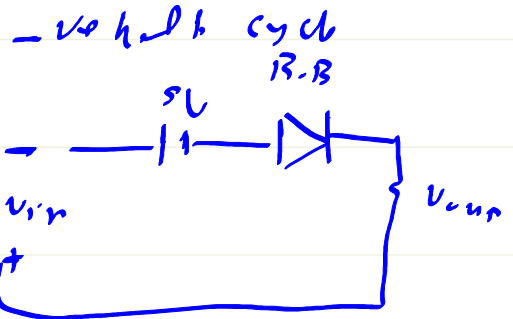
$$v_{out} = 0$$

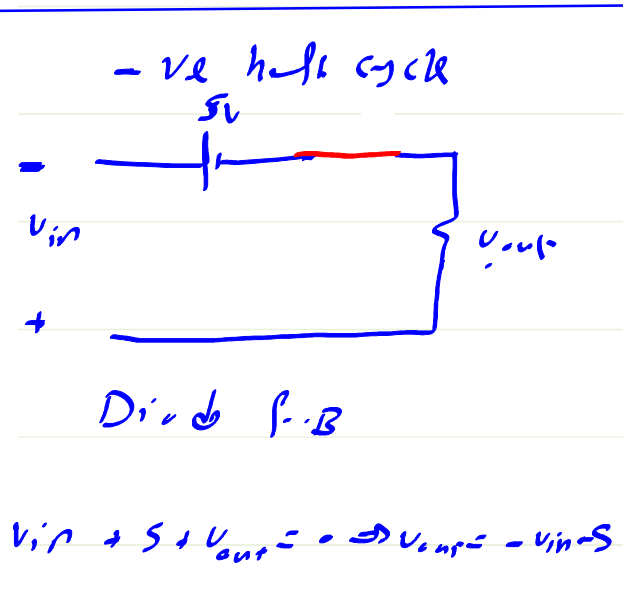
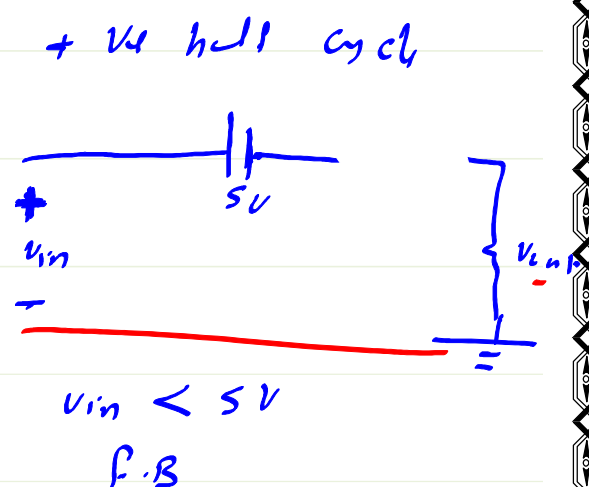
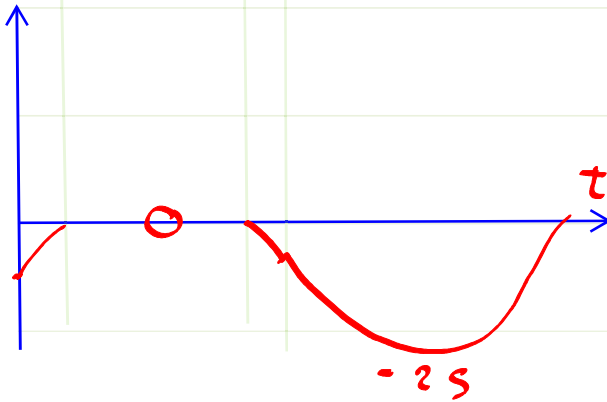
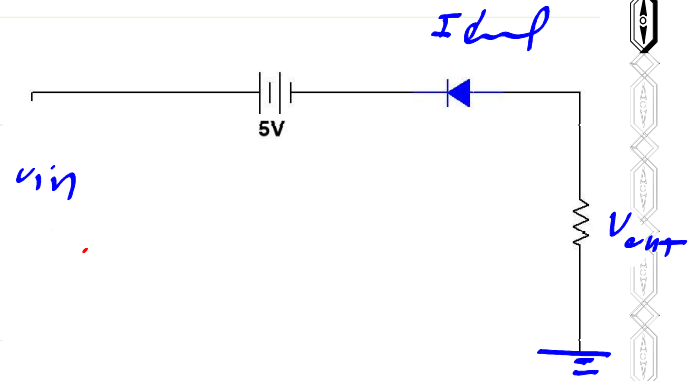
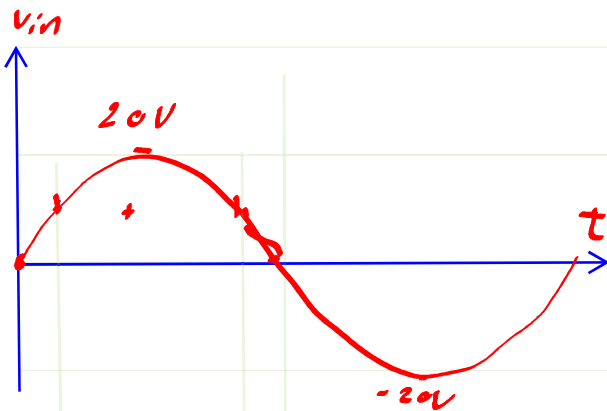
Ex



$$-v_{in} + 5 + 0.7 + v_{out} = 0$$

$$v_{out} = v_{in} - 5.7V$$



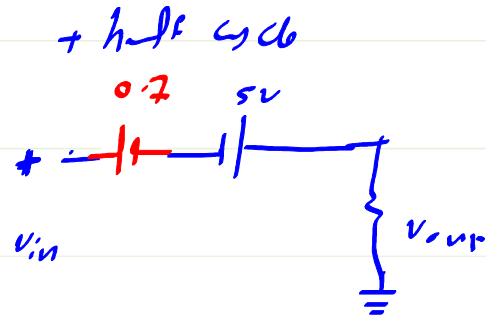
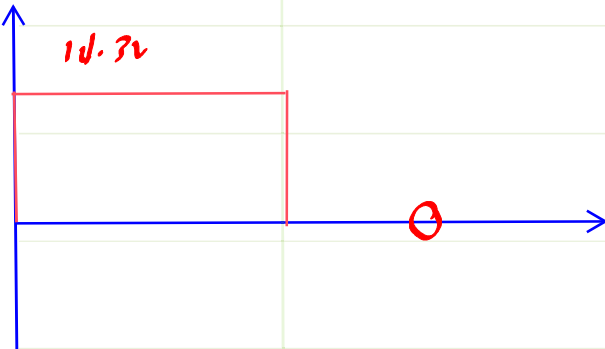
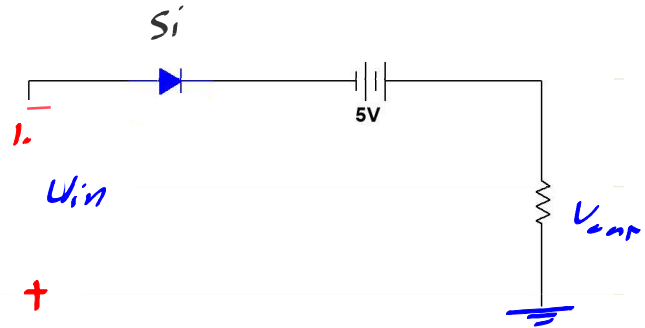
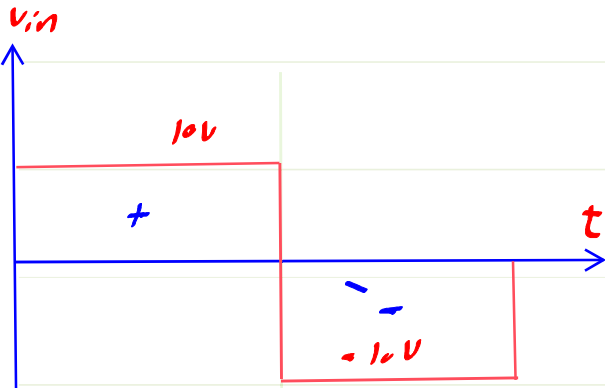


$-v_{in} + 5 + V_{out} = 0$

$V_{out} = v_{in} - 5$

$v_{in} \geq 5$

f.B



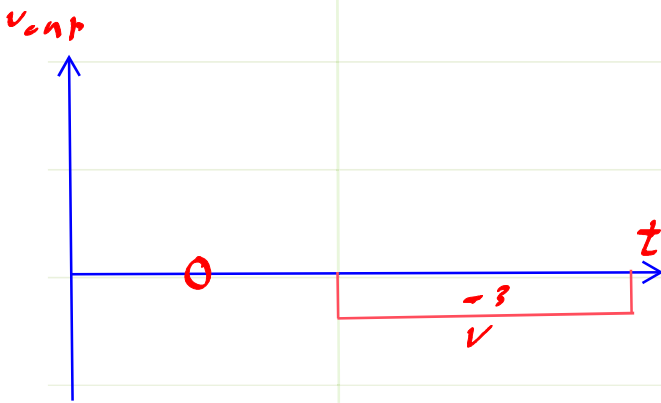
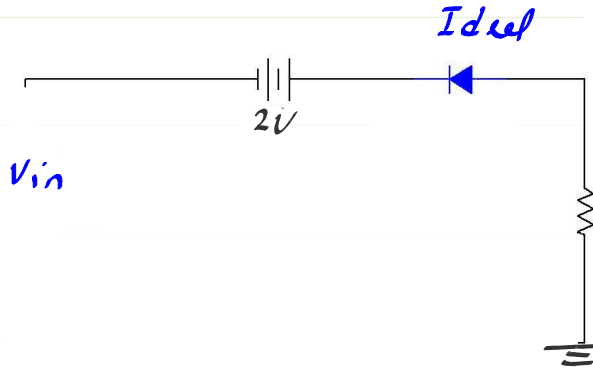
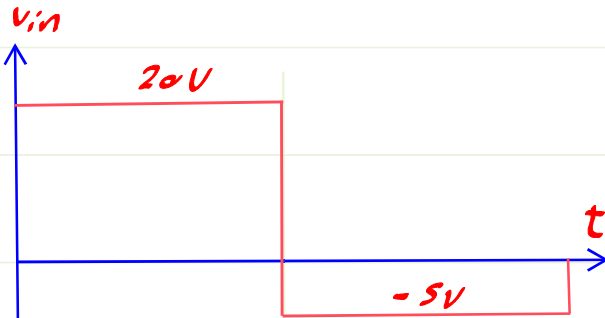
$$-v_{in} + 0.7 - 5 + v_{out} = 0$$

$$v_{out} = 14.3V$$

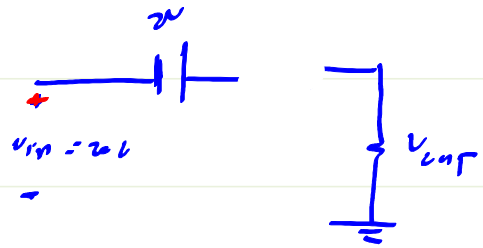
-ve half cycle

Diode R.B

$$v_{out} = 0$$

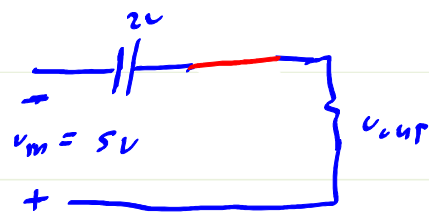


+ v_{in} half cycle



Diode B.B

- v_{in} half cycle



Diode F.B

$$K - 2 + v_{out} = 0$$

$$v_{out} = -3V$$