

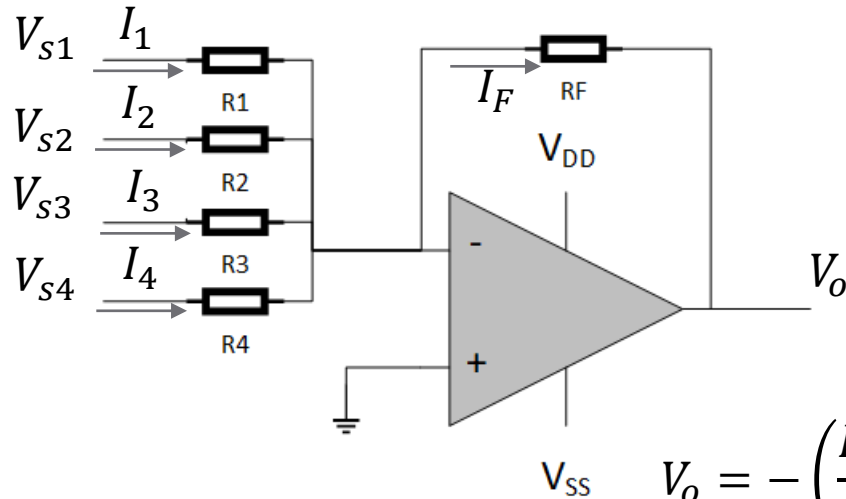
ELM320 ANALOG ELEKTRONİK

Ders Materyali

İŞLEMSEL YÜKSELTEÇ
UYGULAMA DEVRELERİ

İŞLEMSEL YÜKSELTEÇ UYGULAMA DEVRELERİ

Toplama yükselteci:

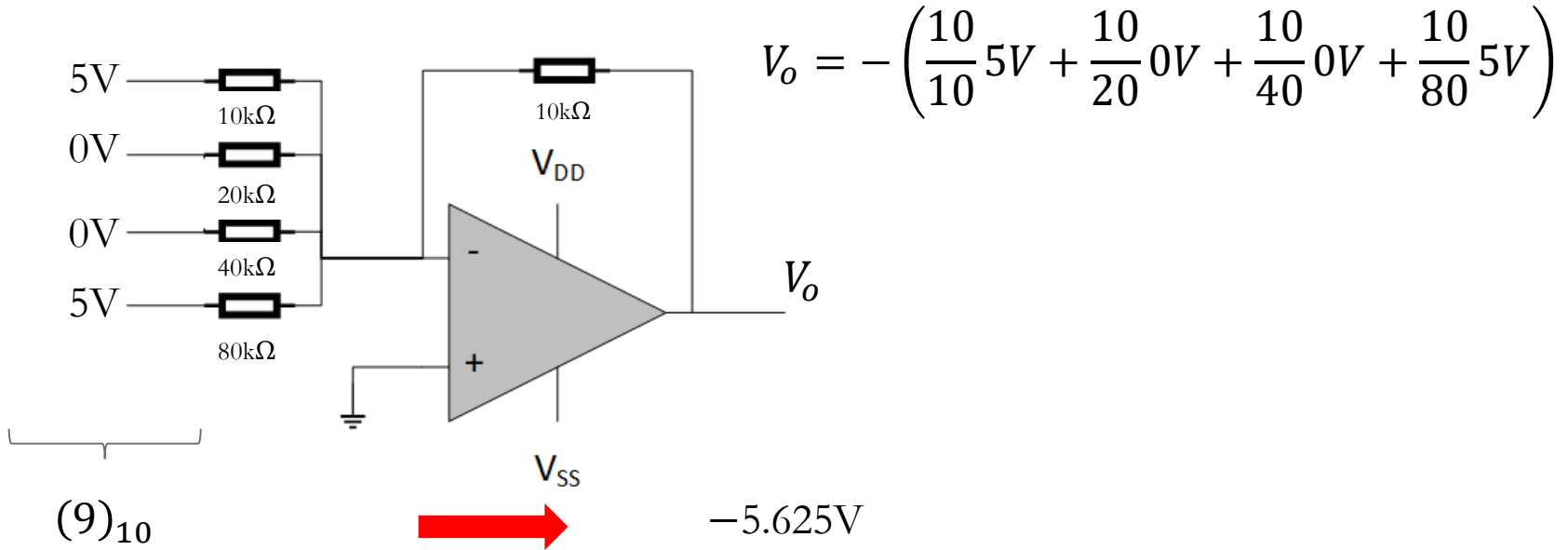


$$I_F = I_1 + I_2 + I_3 + I_4$$

$$V_o = - \left(\frac{RF}{R1} V_{s1} + \frac{RF}{R2} V_{s2} + \frac{RF}{R3} V_{s3} + \frac{RF}{R4} V_{s4} \right)$$

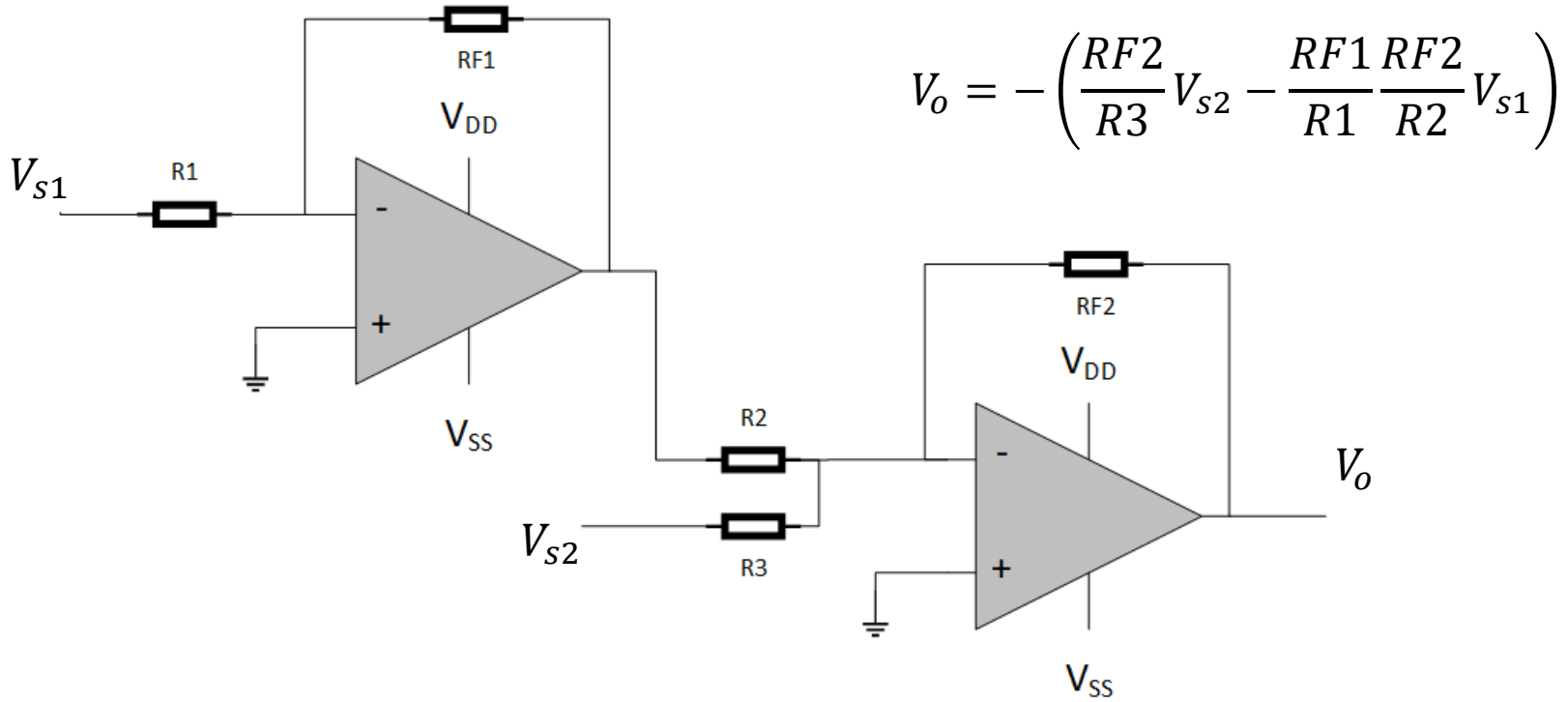
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Sayısal/Analog dönüştürme işlemi:



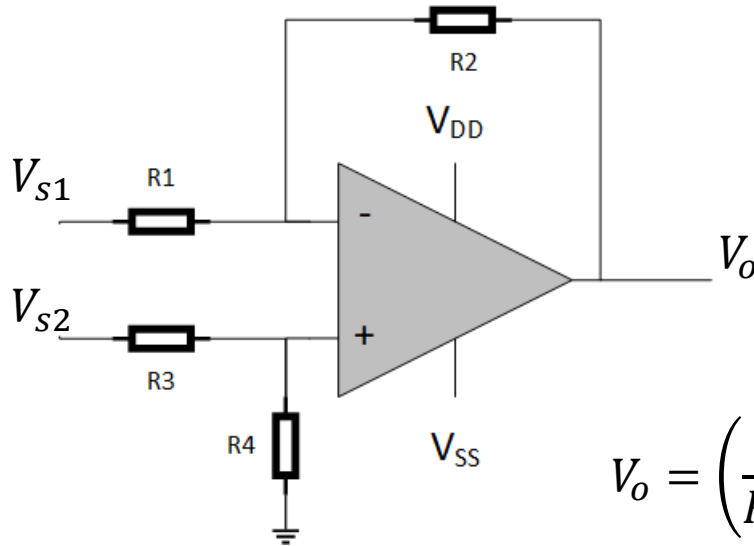
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Çıkartma yükselteci:



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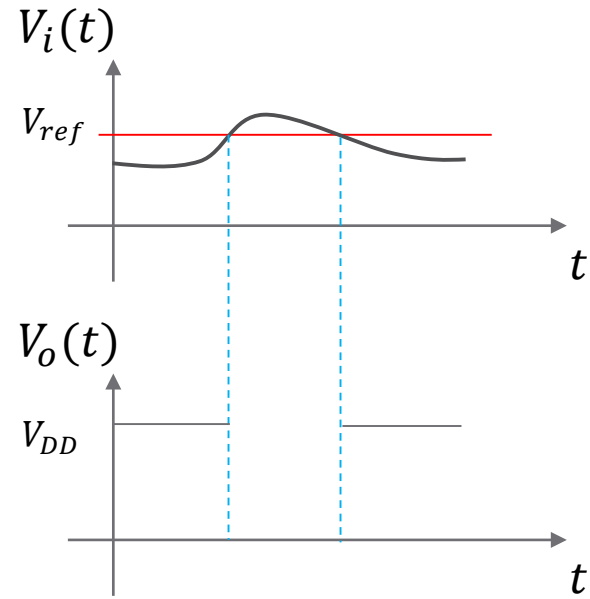
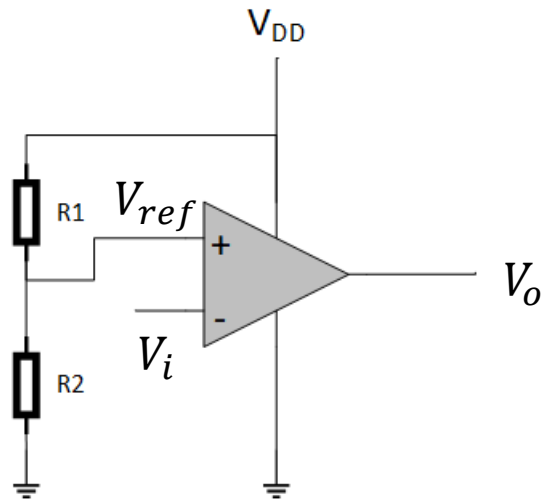
Tek işlemsel yükselteç katmanı ile kurulan çıkartma yükselteci:



$$V_o = \left(\frac{R4}{R3 + R4} \frac{R1 + R2}{R1} V_{s2} - \frac{R4}{R2} V_{s1} \right)$$

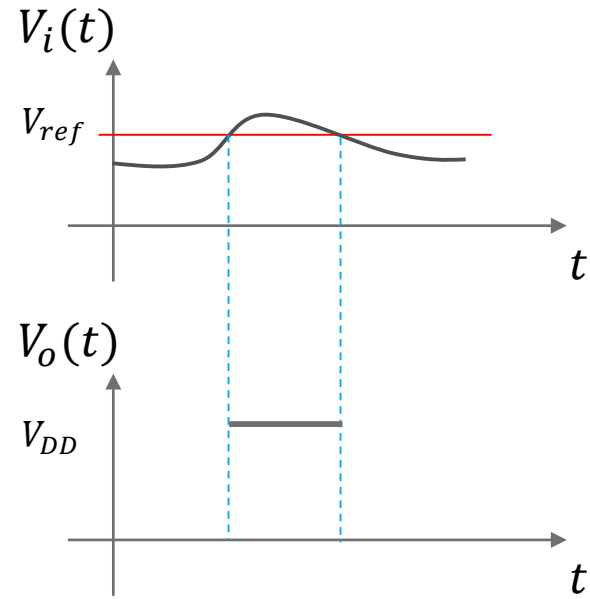
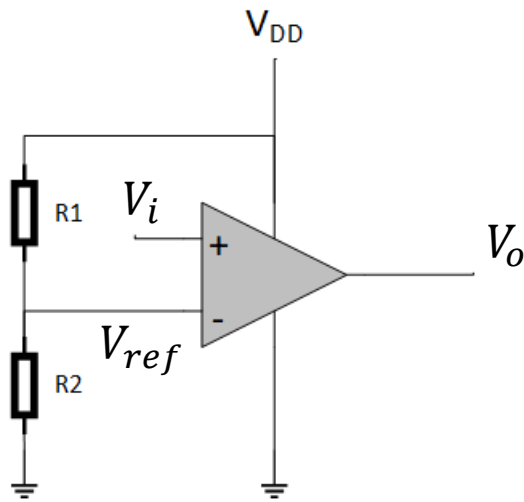
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Eviren tip karşılaştırıcı:



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Evirmeyen tip karşılaştırıcı:



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