

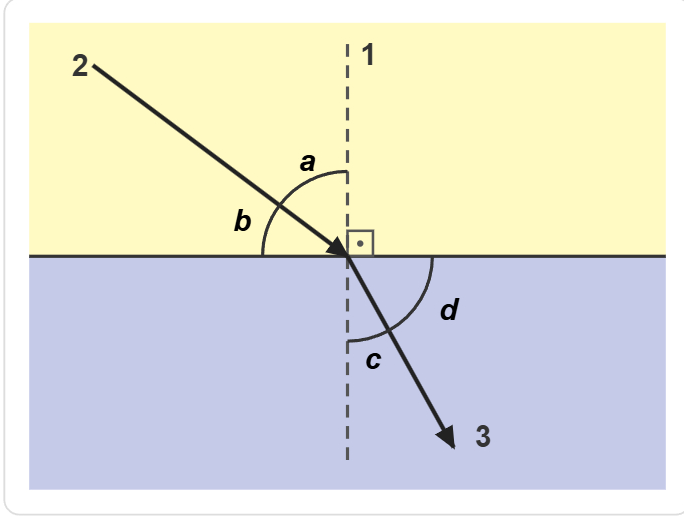
Adı Soyadı

Sınıfı / No

Tarih

A. İŞIĞIN KIRILMASI VE KAVRAMLAR

SORU: Işığın kırılması ile ilgili aşağıdaki şekil üzerinde rakam ve harflerle belirtilen kavramların neler olduğunu yazınız.

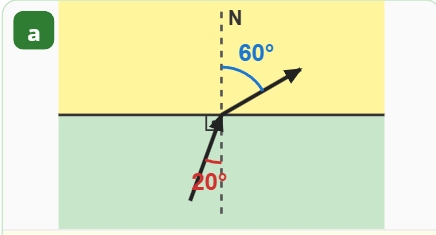


- 1:
- 2:
- 3:
- a:
- b:
- c:
- d:

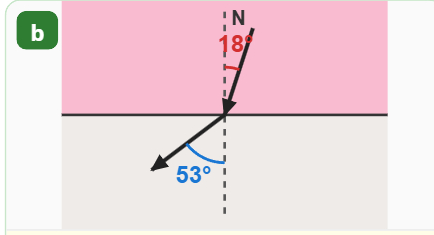
ÖĞRENCİ NOTLARI

B. GELME VE KIRILMA AÇILARININ HESAPLANMASI

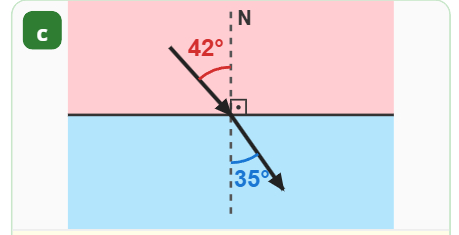
Aşağıda verilen ışınların gelme ve kırılma açılarını altlarında boş bırakılan yerlere yazınız. Kırmızı açılar ışının gelen tarafındaki, mavi açılar ise kırılan tarafındaki açılardır.



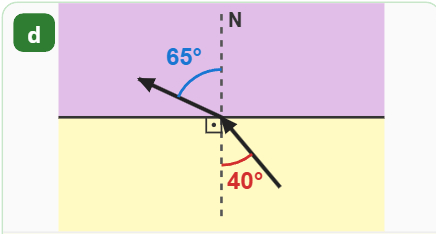
Gelme açısı:
Kırılma açısı:



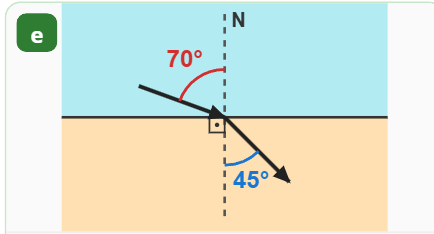
Gelme açısı:
Kırılma açısı:



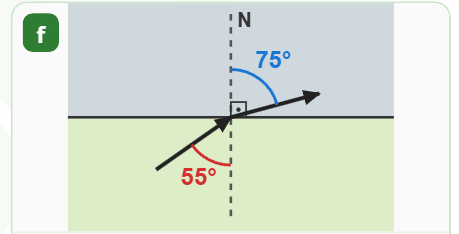
Gelme açısı:
Kırılma açısı:



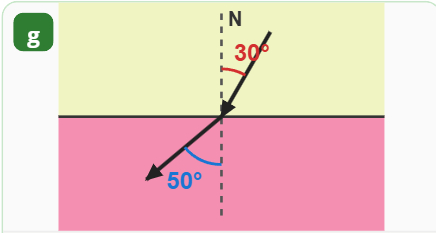
Gelme açısı:
Kırılma açısı:



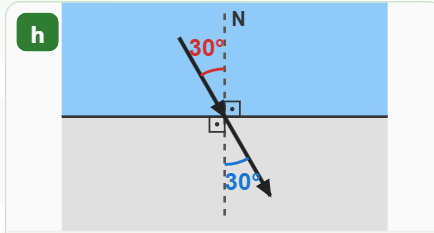
Gelme açısı:
Kırılma açısı:



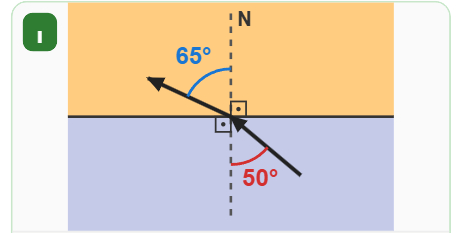
Gelme açısı:
Kırılma açısı:



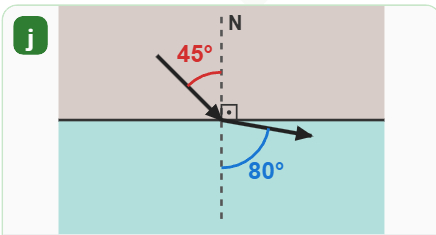
Gelme açısı:
Kırılma açısı:



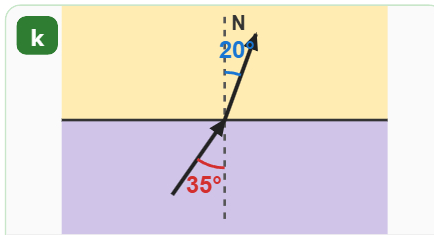
Gelme açısı:
Kırılma açısı:



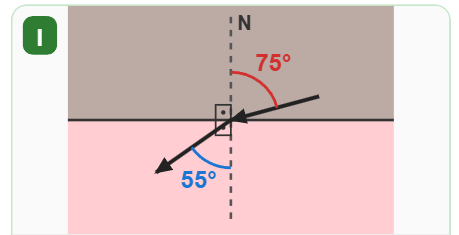
Gelme açısı:
Kırılma açısı:



Gelme açısı:
Kırılma açısı:



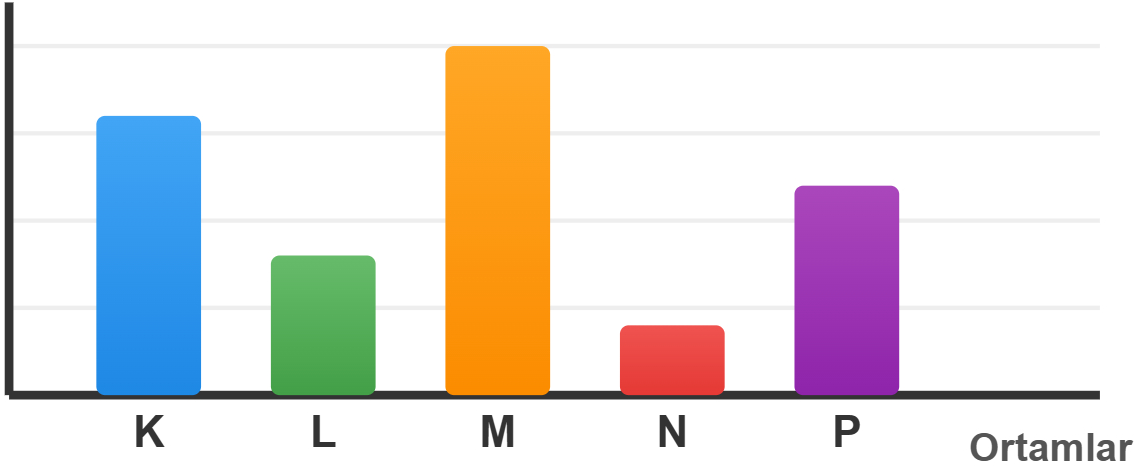
Gelme açısı:
Kırılma açısı:



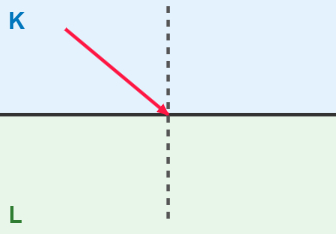
Gelme açısı:
Kırılma açısı:

C. ORTAM YOĞUNLUKLARI VE IŞIĞIN KIRILMASI

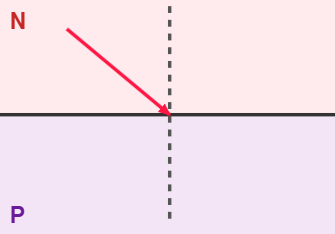
Aşağıdaki grafikte K, L, M, N ve P ortamlarının yoğunlukları verilmiştir. Bu grafikten yararlanarak, 9 farklı durumda verilen I ışınının izleyeceği yolu yaklaşık olarak çiziniz.



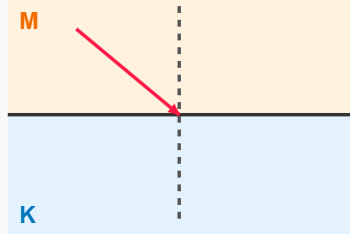
1. DURUM



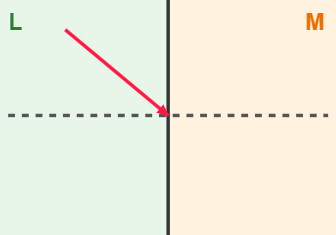
2. DURUM



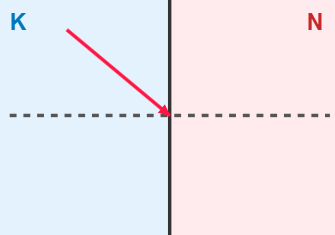
3. DURUM



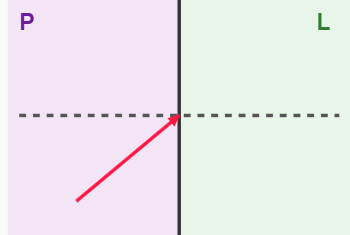
4. DURUM



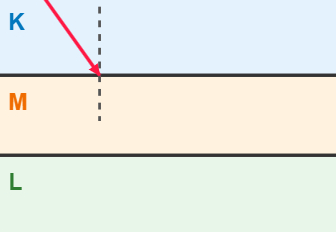
5. DURUM



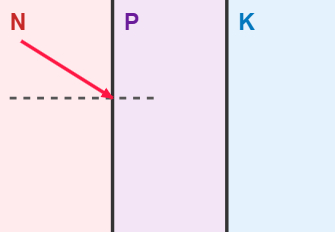
6. DURUM



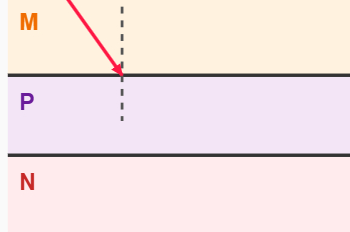
7. DURUM



8. DURUM

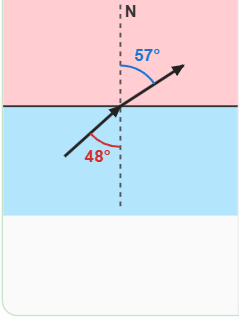
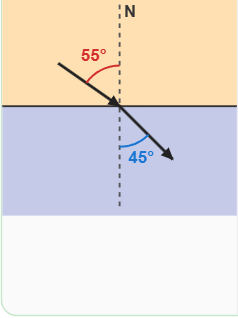
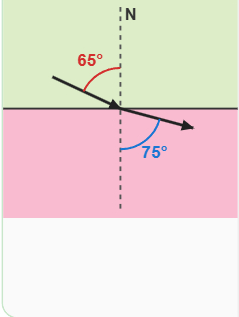
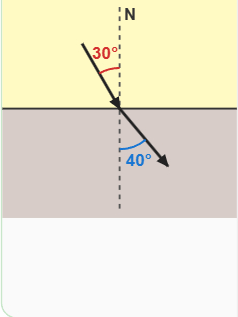
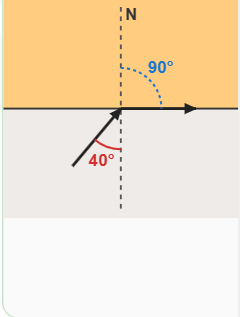
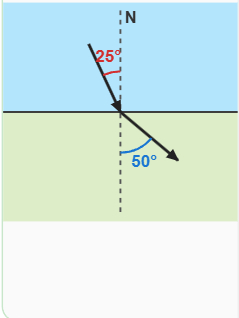
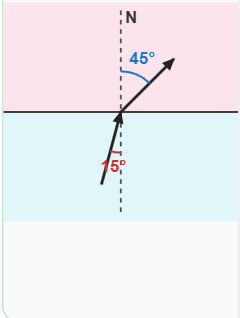
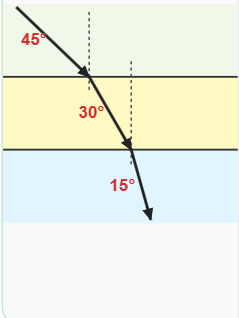
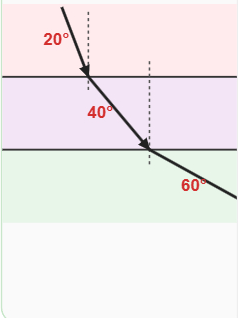


9. DURUM



D. KUTULARDAKİ ORTAMLARIN YOĞUNLUKLARI

Aşağıda verilen ışınların izlediği yollara bakarak her ortam için yan taraftaki kutulara "Az Yoğun", "Çok Yoğun" gibi uygun ifadeler yazınız. (j, k ve l ışıklarında 3 ortamı birbirleriyle kıyaslayarak "Az, Orta, Çok" yazınız.)

<p>a</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>b</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>c</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>d</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>e</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>f</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>g</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>h</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>ı</p> 	<p>Üst Ortam: <input type="text"/></p> <p>Alt Ortam: <input type="text"/></p>
<p>j</p> 	<p>Üst: <input type="text"/></p> <p>Orta: <input type="text"/></p> <p>Alt: <input type="text"/></p>
<p>k</p> 	<p>Üst: <input type="text"/></p> <p>Orta: <input type="text"/></p> <p>Alt: <input type="text"/></p>
<p>l</p> 	<p>Üst: <input type="text"/></p> <p>Orta: <input type="text"/></p> <p>Alt: <input type="text"/></p>