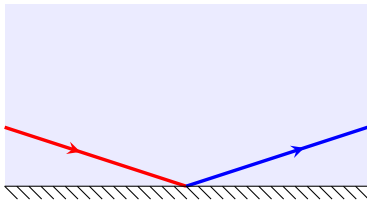
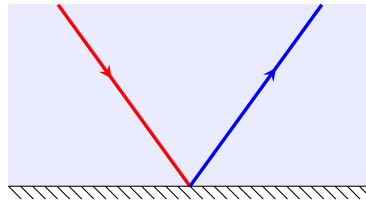


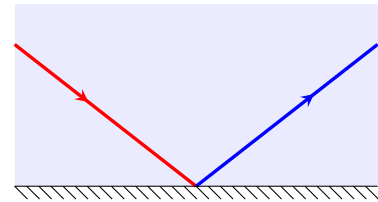
For each of the following ray diagrams measure the angle of incidence,  $i$  and reflection  $r$ . You will need to draw the normal first.



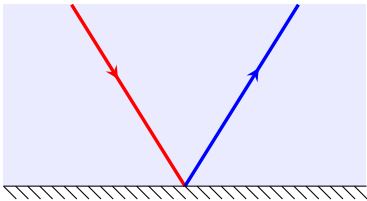
1)



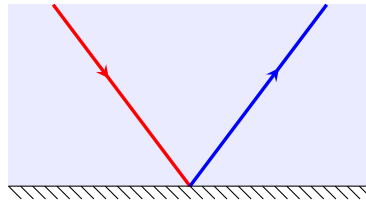
2)



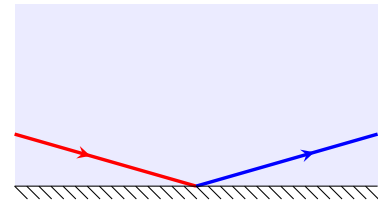
3)



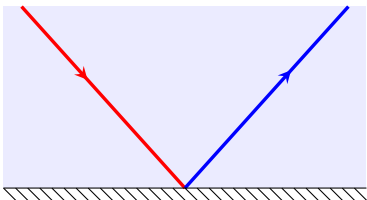
4)



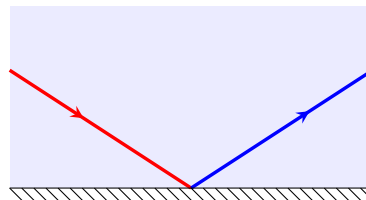
5)



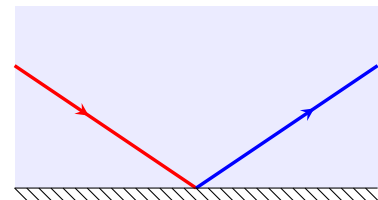
6)



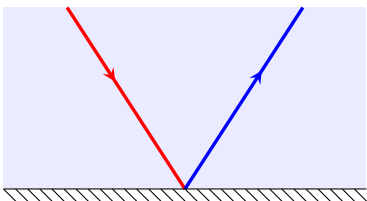
7)



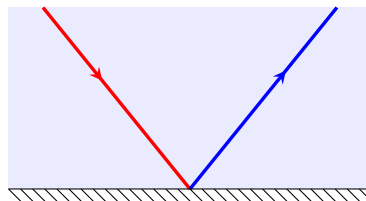
8)



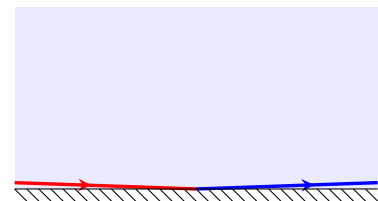
9)



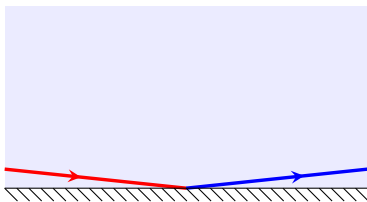
10)



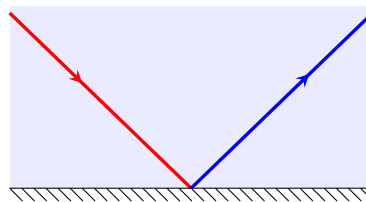
11)



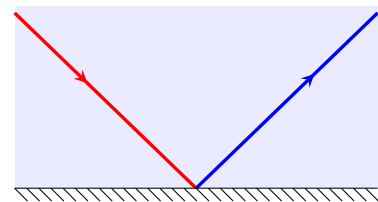
12)



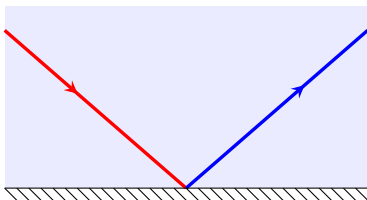
13)



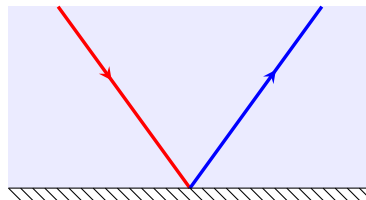
14)



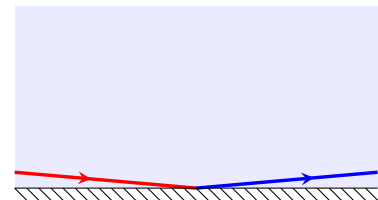
15)



16)



17)



18)

**Answers**

- 1)  $i=72^\circ, r=72^\circ$
- 2)  $i=36^\circ, r=36^\circ$
- 3)  $i=52^\circ, r=52^\circ$
- 4)  $i=32^\circ, r=32^\circ$
- 5)  $i=37^\circ, r=37^\circ$
- 6)  $i=74^\circ, r=74^\circ$
- 7)  $i=42^\circ, r=42^\circ$
- 8)  $i=57^\circ, r=57^\circ$
- 9)  $i=56^\circ, r=56^\circ$
- 10)  $i=33^\circ, r=33^\circ$
- 11)  $i=39^\circ, r=39^\circ$
- 12)  $i=88^\circ, r=88^\circ$
- 13)  $i=84^\circ, r=84^\circ$
- 14)  $i=46^\circ, r=46^\circ$
- 15)  $i=46^\circ, r=46^\circ$
- 16)  $i=49^\circ, r=49^\circ$
- 17)  $i=36^\circ, r=36^\circ$
- 18)  $i=85^\circ, r=85^\circ$