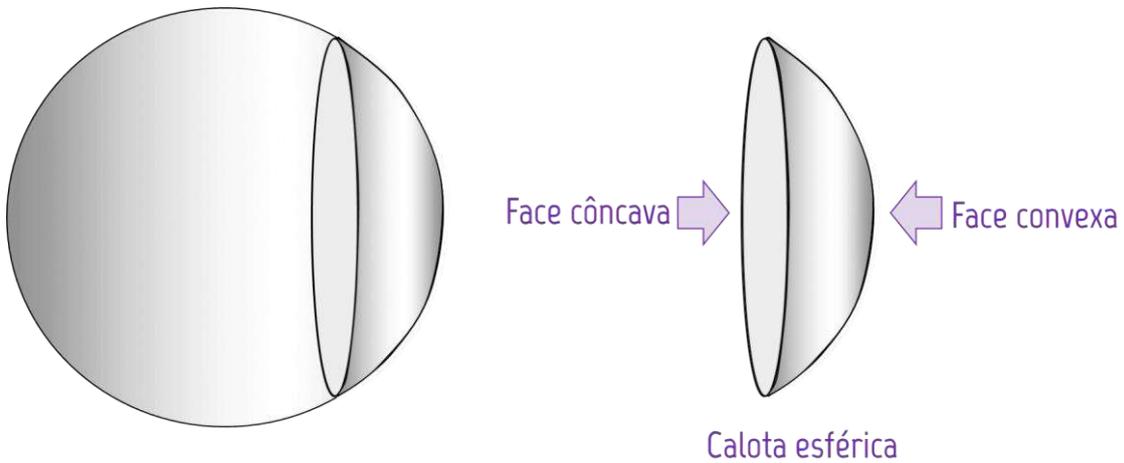


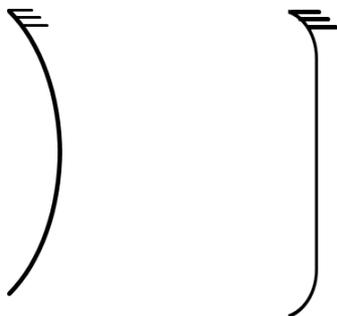
Espelhos esféricos (parte 01)

Espelhos esféricos

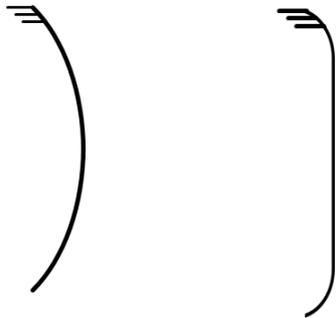


Tipos de espelho esférico

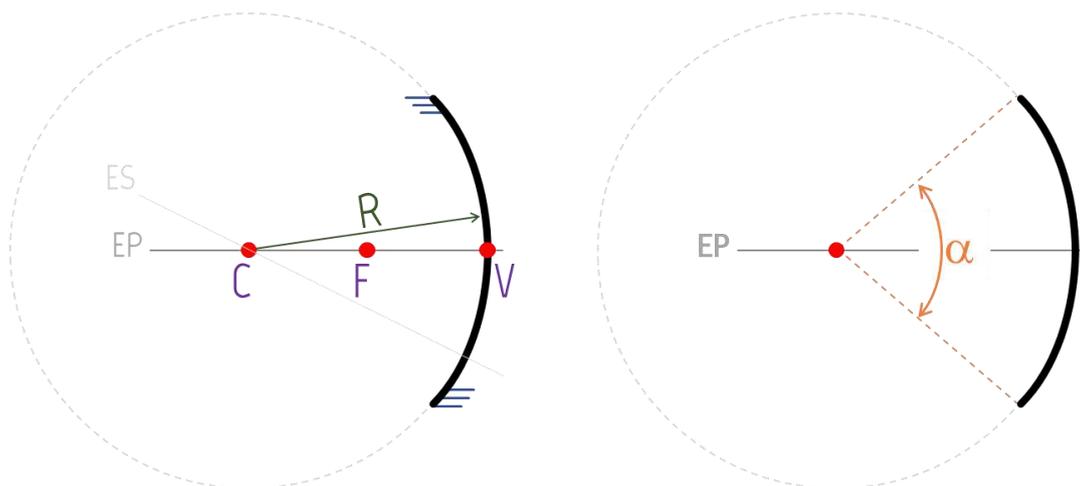
Côncavo



Convexo



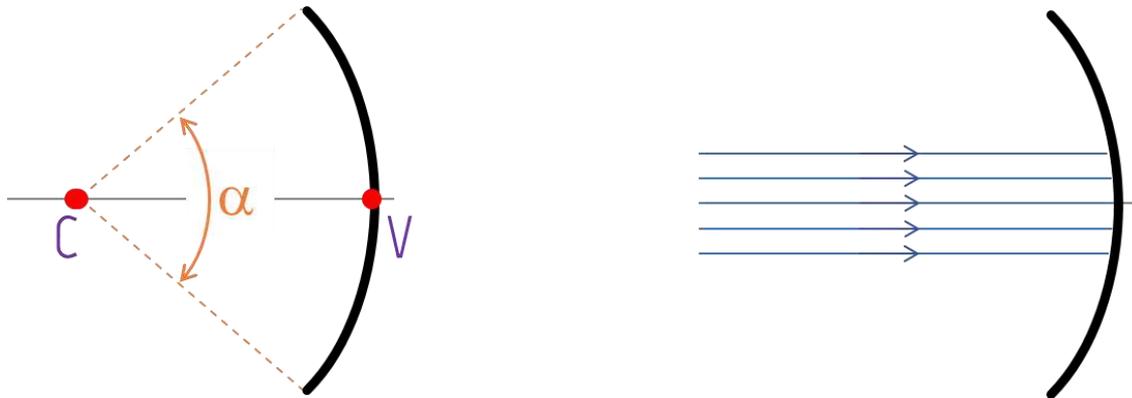
Elementos de um espelho esférico



Legenda

EP: eixo principal; C: centro de curvatura; ES: eixo secundário; R: raio de curvatura; V: vértice; F: foco; α : ângulo de abertura.

Condições de nitidez de Gauss



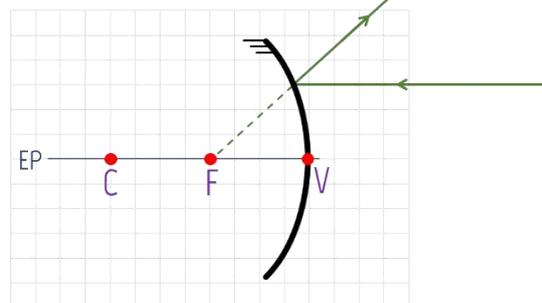
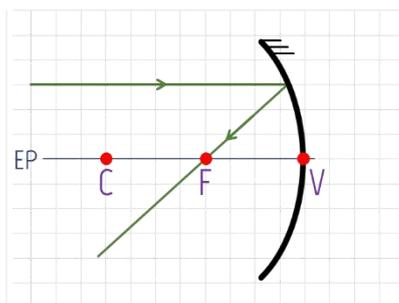
$$\alpha \leq 10$$

Os raios incidentes devem ser paralelos ou pouco inclinados em relação ao eixo principal.

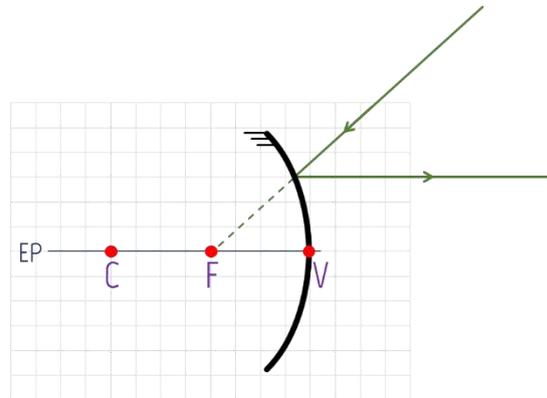
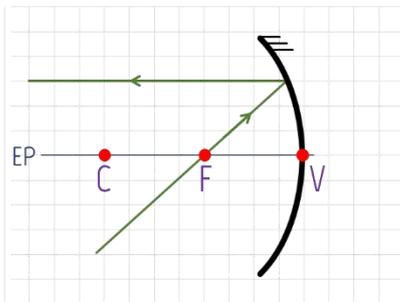
Os raios incidentes devem bem próximos do eixo principal.

Raios notáveis

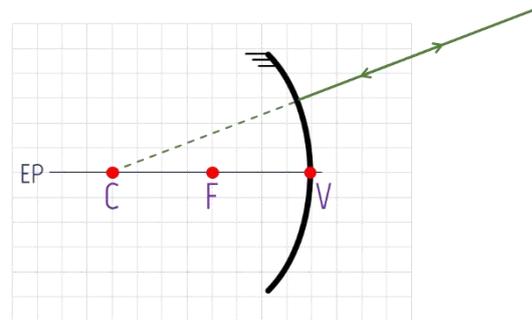
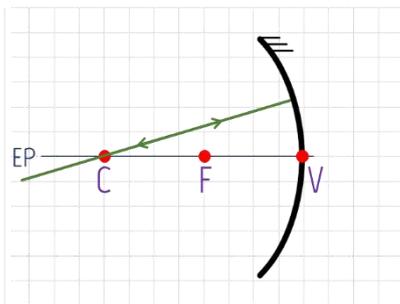
Todo raio que incide paralelamente ao eixo principal reflete passando pelo foco.



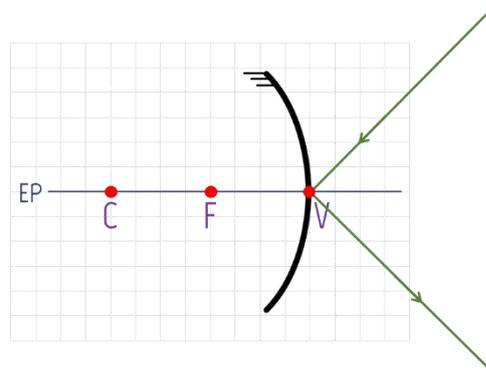
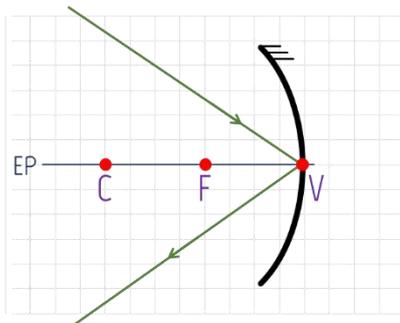
Todo raio que incide passando pelo foco reflete paralelamente ao eixo principal.



Todo raio que incide passando pelo centro de curvatura reflete passando pelo próprio centro.



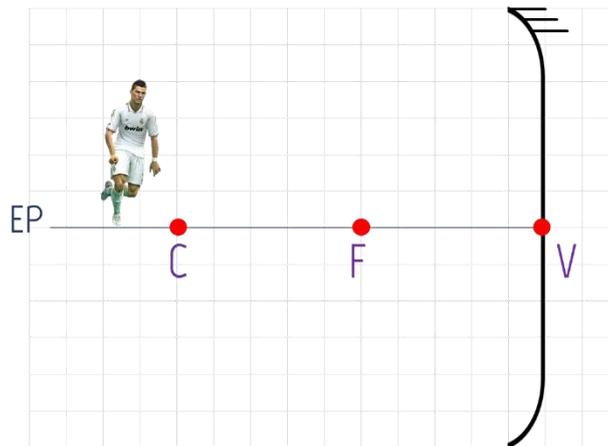
Todo raio que incide passando pelo vértice reflete simétrico ao eixo principal.



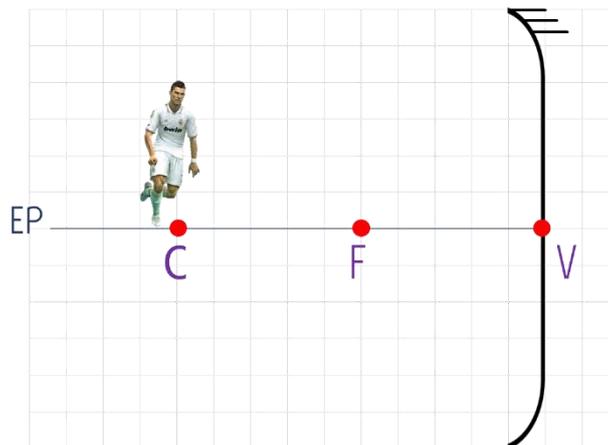
Exercício

Para cada um dos itens a seguir escolha dois raios notáveis para desenhar as imagens de cada um dos objetos colocados em frente aos respectivos espelhos esféricos e classifique a imagem gerada.

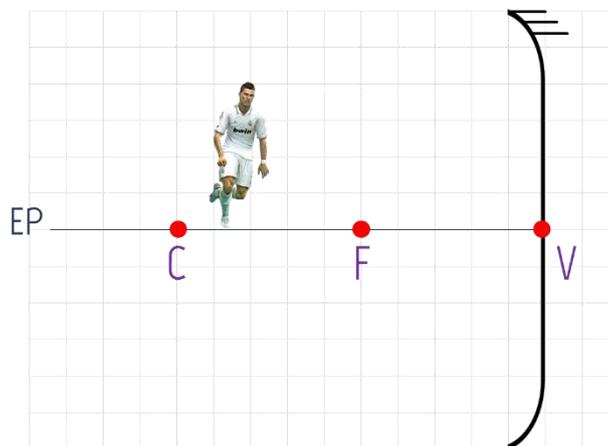
a) objeto depois do centro de curvatura de um espelho côncavo.



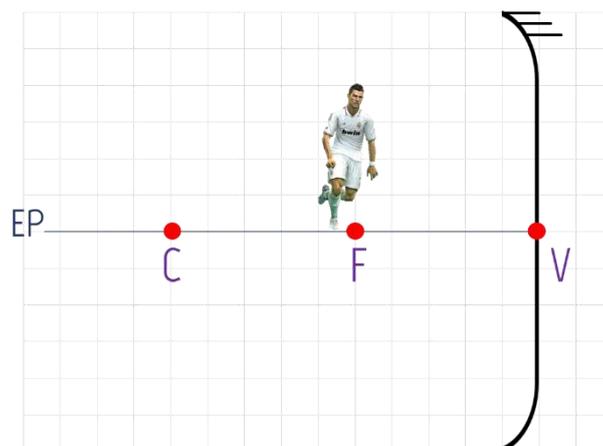
b) objeto sobre o centro de curvatura de um espelho côncavo.



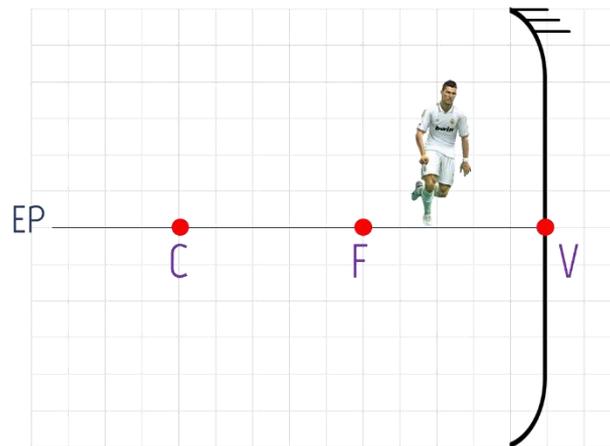
c) objeto entre o centro de curvatura e o foco de um espelho côncavo.



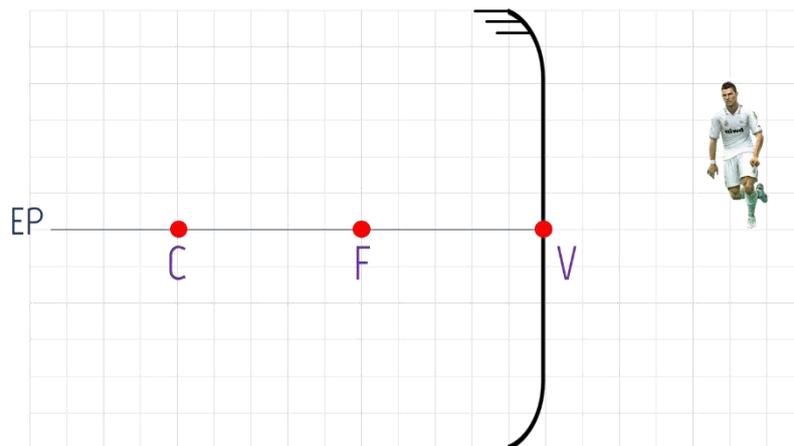
d) objeto sobre o foco de um espelho côncavo.



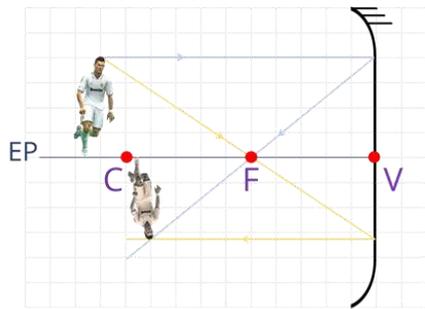
e) objeto entre foco e o vértice de um espelho côncavo.



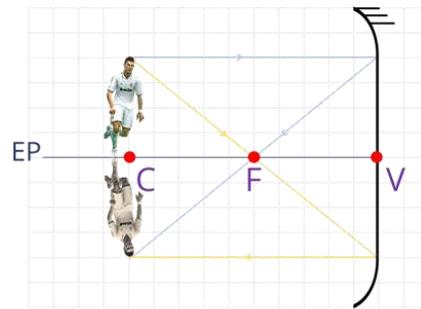
f) objeto na frente de um espelho convexo.



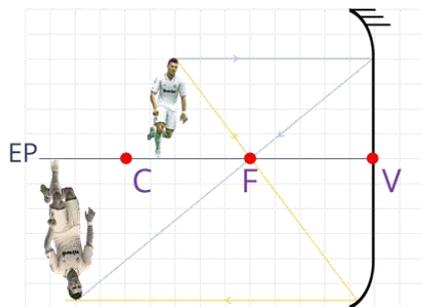
Resumo



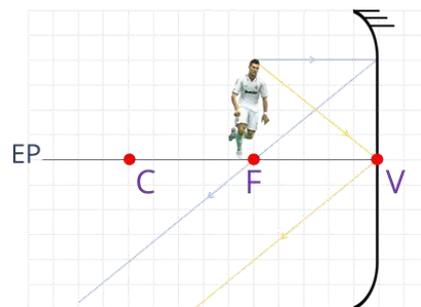
RE, IN, ME



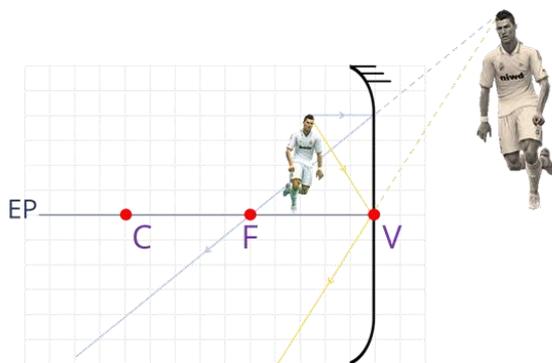
RE, IN, IGUAL



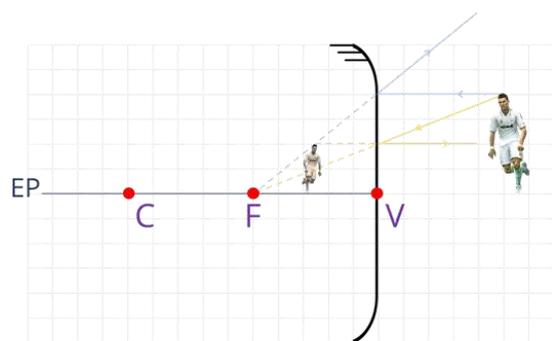
RE, IN, MA



IMPRÓPRIA



VI, DI, MA



VI, DI, ME