```
In [1]:  using Interact
         using Gadfly
```
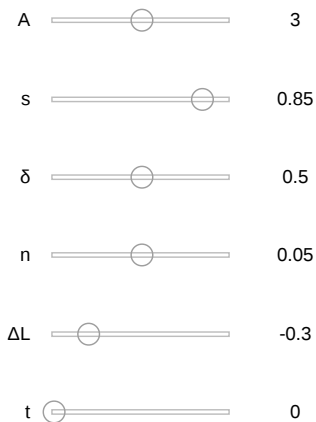
The Solow-Swan Model

Key Equation

$$\partial k/k = A \cdot s \cdot y/k - (s \cdot \delta + n)$$

```
In [3]:  k_domain = linspace(0, 10, 100)

         @manipulate for A in 1:5, s in 0:0.05:1, δ in 0:0.05:1, n in 0:0.01:0.1, ΔL in -.5:.1:.5, t in 0:2:25
             plot(
                 # Initial State
                 layer(x=[5], y=[.5*.5+.05], Geom.point, Theme(default_color=colorant"black", line_width=1pt)),
                 layer(xintercept=[5.0], Geom.vline(color=["black"], style=[[1mm]], size=[.5mm])),
                 layer(yintercept=[.5*.5+.05], Geom.hline(color=["black"], size=[.5mm])),
                 layer(x=k_domain, y=3*.5*(1/k_domain), Geom.line, Theme(default_color=colorant"black", line_width=1
                 # Changing
                 layer(x=[(A*s)/(s*δ+n)*(1+ΔL/(t+1))], y=[s*δ+n], Geom.point, Theme(default_color=colorant"red")),
                 layer(xintercept=[(A*s)/(s*δ+n)*(1+ΔL/(t+1))], Geom.vline(color=["red"], style=[[1mm]], size=[.5mm]
                 layer(yintercept=[s*δ+n], Geom.hline(color=["red"], size=[.5mm])),
                 layer(x=k_domain, y=A*s*(1/(k_domain/(1+ΔL/(t+1)))), Geom.line, Theme(default_color=colorant"red",
                 # Configuration
                 Coord.Cartesian(xmin=0,xmax=10,ymin=0,ymax=1),
                 Guide.xlabel("k = K/L (capital per worker)"),
                 Guide.ylabel("Determinants of Δk/k")
             )
         end
```

A ───────⊖─────────   3

s ──────────────⊖────   0.85

δ ───────⊖─────────   0.5

n ───────⊖─────────   0.05

ΔL ──⊖──────────────   -0.3

t ⊖─────────────────   0

Out[3]: