Figure 9.1: Isocost Lines

$L$, Units of labor per year

$K$, Units of capital per year

$150$ isocost

$100$ isocost

$50$ isocost

Image by MIT OpenCourseWare.
Figure 9-2: Cost Minimization

$K = 2.5, \text{ Units of capital per year}$

$L = 5, \text{ Units of labor per year}$

Image by MIT OpenCourseWare.
Figure 9-3: Cost Minimization with an increase in wages

\begin{align*}
K_x &= 2.5 \\
K_y &= 3.1 \\
L_x &= 5 \\
L_y &= 4.1
\end{align*}

\begin{align*}
w &= 5 \\
w &= 7.5
\end{align*}

$61.24$ isocost
$\sqrt{12.5}$ isoquant
$\$50$ isocost

Image by MIT OpenCourseWare.
Figure 9-4a: Long-run expansion path (linear)
Figure 9-4b: Long-run expansion path: capital becomes less productive

$K$, Units of capital per year

$L$, Units of labor per year

Expansion path
Figure 9-4c: Long-run expansion path: labor becomes less productive
14.01SC Principles of Microeconomics
Fall 2011

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.