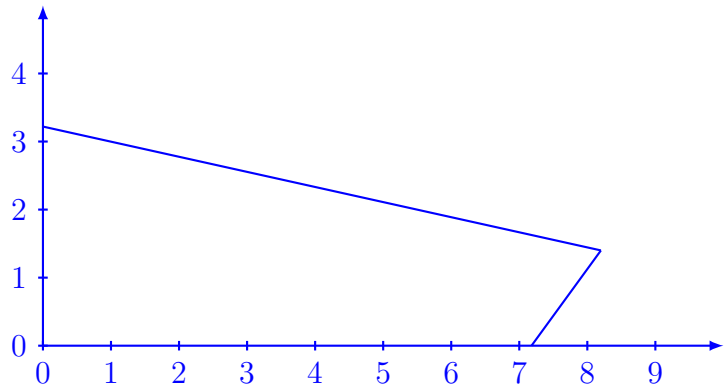
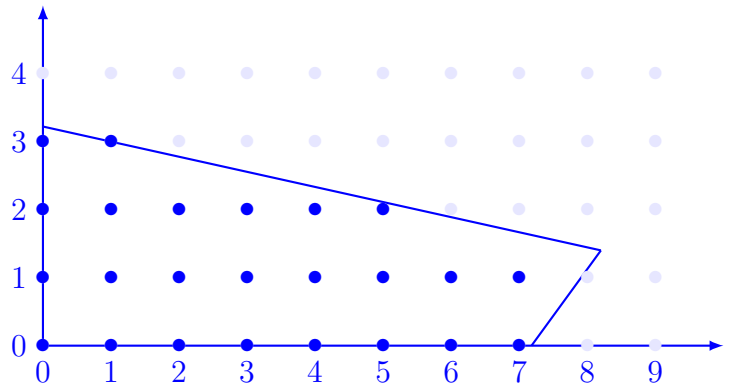
List of Figures



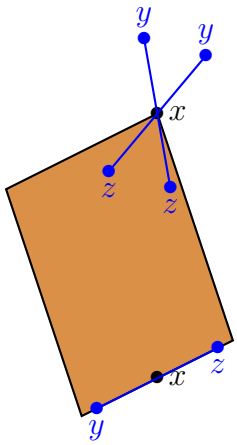

```
\begin{tikzpicture}[blue,thick,scale=0.9]
  \draw[->,-latex] (0,0) -- (10,0) ;
  \draw[->,-latex] (0,0) -- (0,5) ;

  \draw (0,3.22)--(8.2,1.4) ;
  \draw (8.2,1.4)--(7.18,0) ;

  \foreach \x/\xtext in {0,1,...,9} {
    \draw[shift={(\x,0)}] (0pt,2pt) -- (0pt,-2pt) node[below]
         {$\xtext$};
  }

  \foreach \y/\ytext in {0,1,...,4} {
    \draw[shift={(0,\y)}] (2pt,0pt) -- (-2pt,0pt) node[left]
         {$\ytext$};
  }
\end{tikzpicture}
```

Figure 1: `domain-01.tex`: Polygon



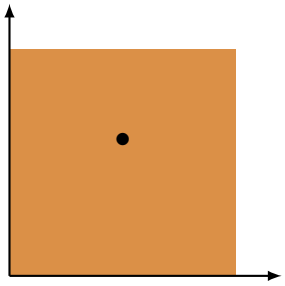

```
\begin{tikzpicture}[blue,thick,scale=0.9]
  \draw[->,-latex] (0,0) -- (10,0) ;
  \draw[->,-latex] (0,0) -- (0,5) ;

  \draw (0,3.22) -- (8.2,1.4) ;
  \draw (8.2,1.4) -- (7.18,0) ;

  \foreach \x/\xtext in {0,1,...,9} {
    \draw[shift={(\x,0)}] (0pt,2pt) -- (0pt,-2pt) node[below]
         {$\xtext$};
  }

  \foreach \y/\ytext in {0,1,...,4} {
    \draw[shift={(0,\y)}] (2pt,0pt) -- (-2pt,0pt) node[left]
         {$\ytext$};
  }

  \foreach \k in {0,1,...,9} {
    \foreach \l in {0,1,...,4} {
      \draw(\k,\l) node[blue!10] {$\bullet$};
    }
  }

  \foreach \k in {0,1,...,7} {
    \draw(\k,0) node {$\bullet$};
  }
  \foreach \k in {0,1,...,7} {
    \draw(\k,1) node {$\bullet$};
  }
  \foreach \k in {0,1,...,5} {
    \draw(\k,2) node {$\bullet$};
  }
  \foreach \k in {0,1} {
    \draw(\k,3) node {$\bullet$};
  }

  \end{tikzpicture}
```

Figure 2: `domain-02.tex`: Polygon with lattice



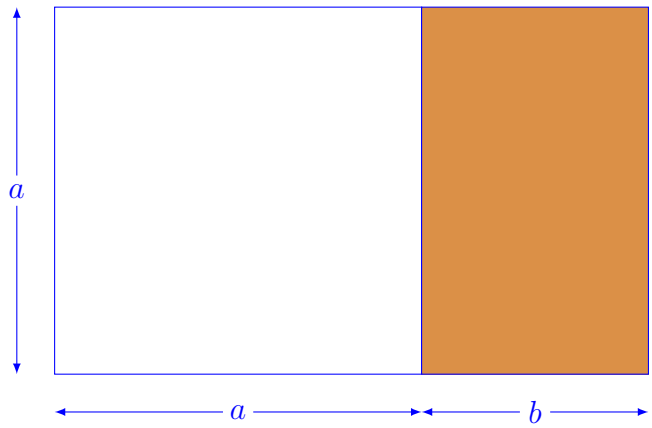

```
\definecolor{cof}{RGB}{219, 144, 71}
\begin{tikzpicture}[thick]
  \coordinate (A1) at (0, 0);
  \coordinate (A2) at (2, 1);
  \coordinate (A3) at (1, 4);
  \coordinate (A4) at (-1, 3);

  \draw[fill=cof, opacity=0.6] (A1) -- (A2) -- (A3) -- (A4) --cycle;
  \draw (A3) node {$\bullet$} node[right] {$x$} ;
  \draw[blue] (A3) -- ++(50:1) node {$\bullet$} node[above] {$y$};
  \draw[blue] (A3) -- ++(230:1) node {$\bullet$} node[below] {$z$};
  \draw[blue] (A3) -- ++(100:1) node {$\bullet$} node[above] {$y$};
  \draw[blue] (A3) -- ++(280:1) node {$\bullet$} node[below] {$z$};
  \draw (1, 0.5) node {$\bullet$}  node[right] {$x$} ;
  \draw[blue] (0.2, 0.1) node {$\bullet$}  node[below]
       {$y$} -- (1.8, 0.9) node {$\bullet$} node[below] {$z$};
\end{tikzpicture}
```

Figure 3: `domain-03.tex`: Filled polygon with directions



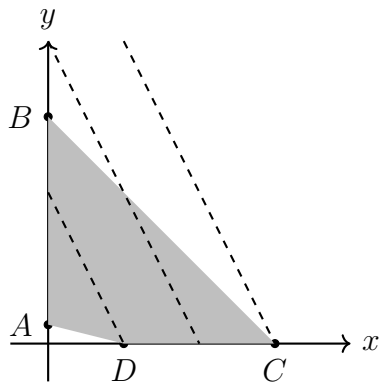
```
\definecolor{cof}{RGB}{219, 144, 71}
\begin{tikzpicture}[scale=3]
  \fill[fill=cof, opacity=0.1] (0, 0) -- (0, 1) -- (1, 1) -- (1, 0);
  \draw[thick, -latex] (0, 0) --(0, 1.2) ;
  \draw[thick, -latex] (0, 0) -- (1.2, 0) ;
  \draw (0.5, 0.6) node {$\bullet$} ;
\end{tikzpicture}
```

Figure 4: `domain-04.tex`: Filled polygon with axes



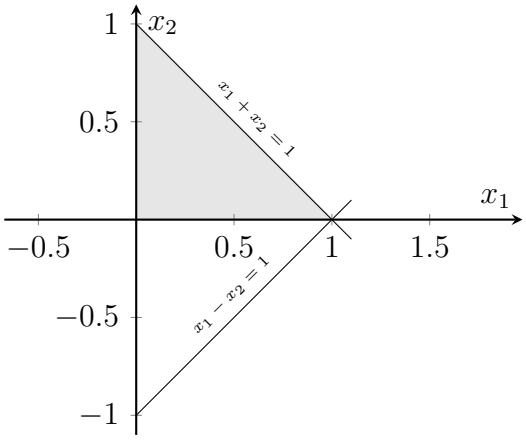

```
\definecolor{cof}{RGB}{219, 144, 71}
\begin{tikzpicture}[blue]
  \def \b {3}
  \def \a {\b * 1.618}
  \def \c {\a + \b}
  \def \m {\c / 2}

  \draw (0, 0) rectangle (\a, \a);
  \draw[fill=cof] (\a, 0) rectangle (\c, \a);
  \draw (\a / 2, -0.5) node {$a$} ;
  \draw[-latex] (\a / 2 + 0.2, -0.5) -- (\a, -0.5) ;
  \draw[-latex] (\a / 2 - 0.2, -0.5) -- (0, -0.5) ;
  \draw (\a + \b / 2, -0.5) node {$b$} ;
  \draw[-latex] (\a + \b / 2 + 0.2, -0.5) -- (\c, -0.5) ;
  \draw[-latex] (\a + \b / 2 - 0.2, -0.5) -- (\a, -0.5) ;
  \draw (-0.5, \a / 2) node {$a$} ;
  \draw[-latex] (-0.5, \a / 2 + 0.2) -- (-0.5, \a);
  \draw[-latex] (-0.5, \a / 2 - 0.2) -- (-0.5, 0);
\end{tikzpicture}
```

Figure 5: `domain-05.tex`: Filled and anotated rectangle



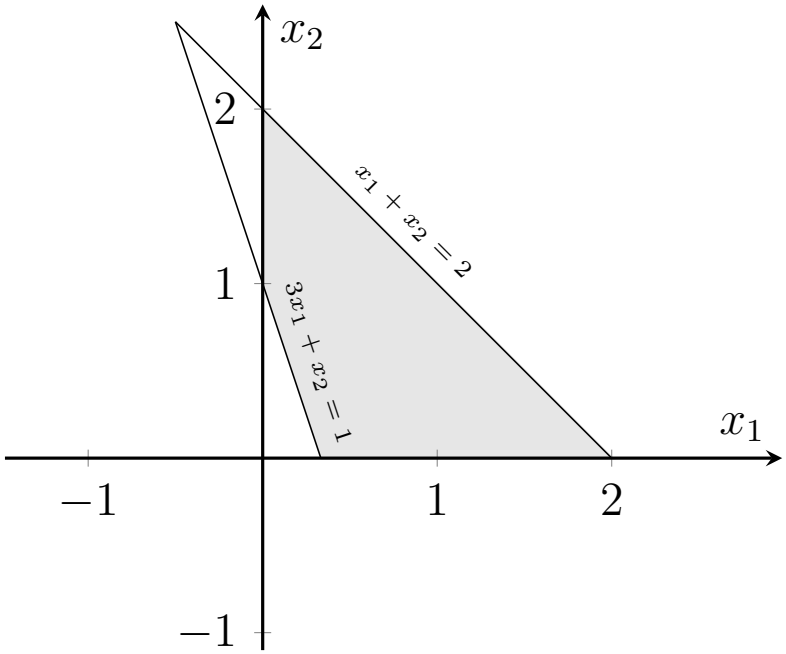

```
\begin{tikzpicture}
  \draw[->, thick] (-0.5, 0)--(4, 0) node[right]{$x$};
  \draw[->, thick] (0, -0.5)--(0, 4) node[above]{$y$};

  \node[
    circle,
    draw=black,
    fill=black,
    inner sep=0pt,
    minimum size=3pt,
    label=below:{$D$}
  ] (d) at (1, 0) {};

  \node[
    circle,
    draw=black,
    fill=black,
    inner sep=0pt,
    minimum size=3pt,
    label=below:{$C$}
  ] (c) at (3, 0) {};
  \node[
    circle,
    draw=black,
    fill=black,
    inner sep=0pt,
    minimum size=3pt,
    label=left:{$B$}
  ] (b) at (0, 3) {};
  \node[
    circle,
    draw=black,
    fill=black,
    inner sep=0pt,
    minimum size=3pt,
    label=left:{$A$}
  ] (a) at (0, 0.25) {};

  \fill[
    opacity=0.5,
    gray!50
  ] (1, 0) -- (3, 0) -- (0, 3) -- (0, 0.25) -- cycle;

  \draw[dashed, thick] (0, 2) -- (1, 0);
  \draw[dashed, thick] (0, 4) -- (2, 0);
  \draw[dashed, thick] (1, 4) -- (3, 0);

\end{tikzpicture}
```

Figure 6: `domain-06.tex`: Polygon and level lines



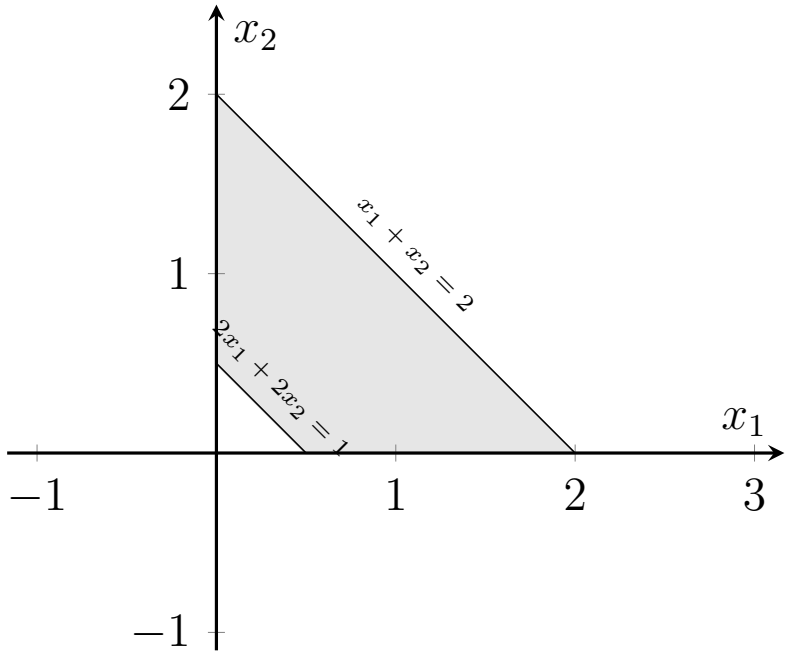

```
\begin{tikzpicture}
  \begin{axis}[
      xlabel={$x_1$},
      ylabel={$x_2$},
      axis on top=true,
      axis equal,
      axis lines=middle,
      samples=41,
      thick,
      xmin=-0.1,
      xmax=1.4,
      ymin=-1.1,
      ymax=1.1,
]
    \addplot[
      thick,
      color=gray!20,
      fill=gray!20,
      fill opacity=0.05
    ] coordinates {
      (0, 1)
      (1, 0)
      (0, 0)
    };

    \addplot[
      color=black,
      thin,
      domain=0:1.1
    ] {1 - x}  node[pos=0.5, sloped, above] {\tiny $x_1+x_2=1$};

    \addplot[
      color=black,
      thin,
      domain=0:1.1
    ] {x - 1} node[pos=0.5, sloped, above] {\tiny $x_1-x_2=1$};
  \end{axis}
\end{tikzpicture}
```

Figure 7: `domain-07.tex`: Feasible set with equations with Pgfplots



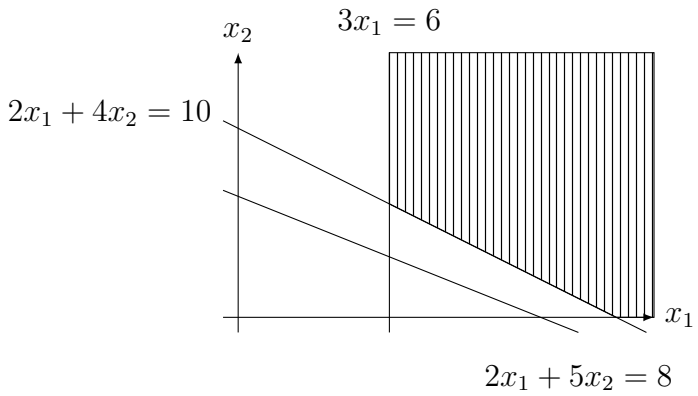

```
\begin{tikzpicture}[scale=1.5]
  \begin{axis}[
      xlabel={$x_1$},
      ylabel={$x_2$},
      axis on top=true,
      axis equal,
      axis lines=middle,
      samples=41,
      thick,
      xmin=-0.6,xmax=2.1,
      ymin=-1.1,ymax=2.6
    ]

    \addplot[
      thick,
      color=gray!20,
      fill=gray!20,
      fill opacity=0.05
    ] coordinates {
      (1/3, 0) (2, 0) (0, 2) (0, 1)
    };

    \addplot[
      color=black,
      thin,
      domain=-0.5:2
    ] {2-x} node[pos=0.5, sloped, above] {\tiny $x_1+x_2=2$};

    \addplot[
      color=black,
      thin,
      domain=-0.5:0.33333
    ] {1-3*x} node[pos=0.8, sloped, above] {\tiny $3x_1+x_2=1$};
  \end{axis}
\end{tikzpicture}
```

Figure 8: `domain-08.tex`: Feasible set with equations with Pgfplots



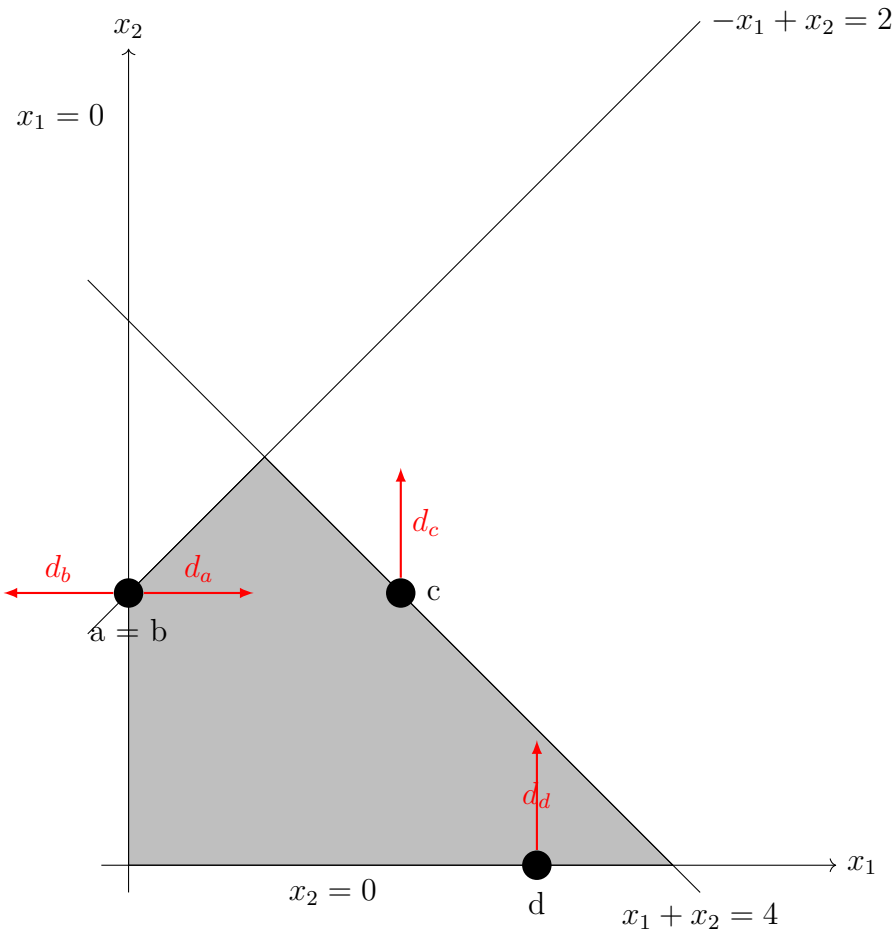

```
\begin{tikzpicture}[scale=1.5]
  \begin{axis}[
      xlabel={$x_1$},
      ylabel={$x_2$},
      axis on top=true,
      axis equal,
      axis lines=middle,
      samples=41,
      thick,
      xmin=-0.1,xmax=2.1,
      ymin=-1.1,ymax=2.5,
    ]

    \addplot[
      thick,
      color=gray!20,
      fill=gray!20,
      fill opacity=0.05
    ] coordinates {
      (2, 0) (1/2, 0) (0, 1/2) (0, 2)
    };

    \addplot[
      color=black,
      thin,
      domain=0:2
    ] {2-x} node[pos=0.5, sloped, above] {\tiny $x_1+x_2=2$};

    \addplot[
      color=black,
      thin,
      domain=0:0.5
    ] {0.5-x} node[pos=0.5, sloped, above] {\tiny $2x_1+2x_2=1$};
  \end{axis}
\end{tikzpicture}
```

Figure 9: `domain-09.tex`: Feasible set with equations with Pgfplots



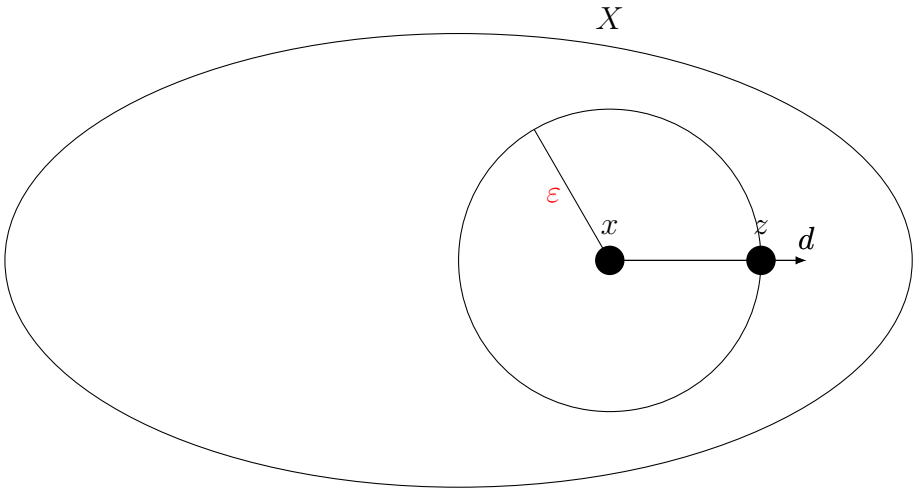

```
\begin{tikzpicture}
  \draw[-latex] (-0.2, 0) -- (5.5, 0) node[right] {$x_1$};
  \draw[-latex] (0, -0.2) -- (0, 3.5) node[above] {$x_2$};
  \draw[color=black] (2, -0.2) -- (2, 3.5);
  \node at (2, 3.9) {$3x_1 = 6$};
  \draw[color=black] (-0.2, 2.6) -- (5.4, -0.2);
  \node at (-1.7, 2.7) {$2x_1+4 x_2 = 10$};
  \draw[color=black] (-0.2, 1.68) -- (4.5, -0.2);
  \node at (4.5, -0.8) {$2x_1+5x_2=8$};
  \draw[pattern=vertical lines]
      (2, 1.5) -- (2, 3.5) -- (5.5, 3.50) -- (5.5, 0)-- (5, 0) -- cycle;
\end{tikzpicture}
```

Figure 10: `domain-10.tex`: Feasible set with pattern



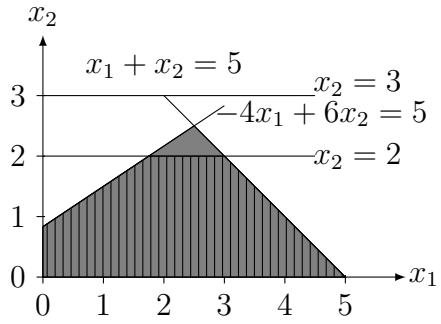

```
\begin{tikzpicture}[scale=1.8, domain=-0.3:4.2, range=-0.4:6]
  \draw[fill=lightgray]  (0, 0) -- (0, 2) -- (1, 3) -- (4, 0) -- cycle;
  \draw[->] (-0.2, 0) -- (5.2, 0) node[right] {$x_1$};
  \draw[->] (0, -0.2) -- (0, 6) node[above] {$x_2$};
  \draw[color=black] plot (\x, \x+2) node[right] {$-x_1 + x_2 = 2$};
  \draw[color=black] plot (\x, 4-\x) node[below] {$x_1 + x_2 = 4$};
  \node at (1.5, -0.2) {$x_2 = 0$};
  \node at (-0.5, 5.5) {$x_1 = 0$};
  \node (A) at (0, 2) [circle, fill, label=below:{a = b}] {};
  \node (da) at (1, 2) {} ;
  \draw[-latex, color=red, thick] (A) -- (da) node[midway, text=red, above] {$d_a$} ;
  \node (db) at (-1, 2) {} ;
  \draw[-latex, color=red, thick] (A) -- (db) node[midway, text=red, above] {$d_b$} ;
  \node (C) at (2, 2) [circle, fill, label=right:c] {};
  \node (dc) at (2, 3) {} ;
  \draw[-latex, color=red, thick] (C) -- (dc) node[midway, text=red, right] {$d_c$} ;
  \node (D) at (3, 0) [circle, fill, label=below:d] {};
  \node (dd) at (3, 1) {} ;
  \draw[-latex, color=red, thick] (D) -- (dd) node[midway, text=red] {$d_d$} ;
\end{tikzpicture}
```

Figure 11: `domain-11.tex`: Feasible set with directions



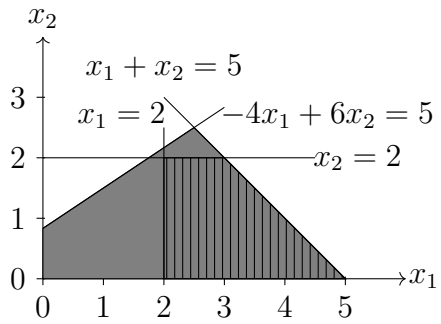

```
\begin{tikzpicture}[scale=2]
  \tikzstyle{Cir}=[circle, minimum width=11pt, draw, inner sep=0pt]
  \draw (0, 0) ellipse[x radius=3, y radius= 1.5];
  \node[at={(1, 1.6)}] {$X$} ;
  \node[at={(1, 0)}, circle, fill, label=$x$] {} ;
  \node[at={(2, 0)}, circle, fill, label=$z$] {} ;
  \draw (1, 0) circle[radius=1];
  \draw [Circle-] (1, 0) -- node[left, red] {$\varepsilon$} (60:1);
  \draw[-latex] (1, 0) -- (2.3, 0)  node[above] {$d$};
  \draw[-latex] (1, 0) -- (2.3, 0)  node[above] {$d$};
\end{tikzpicture}
```

Figure 12: `domain-12.tex`: Ellipsis and circle



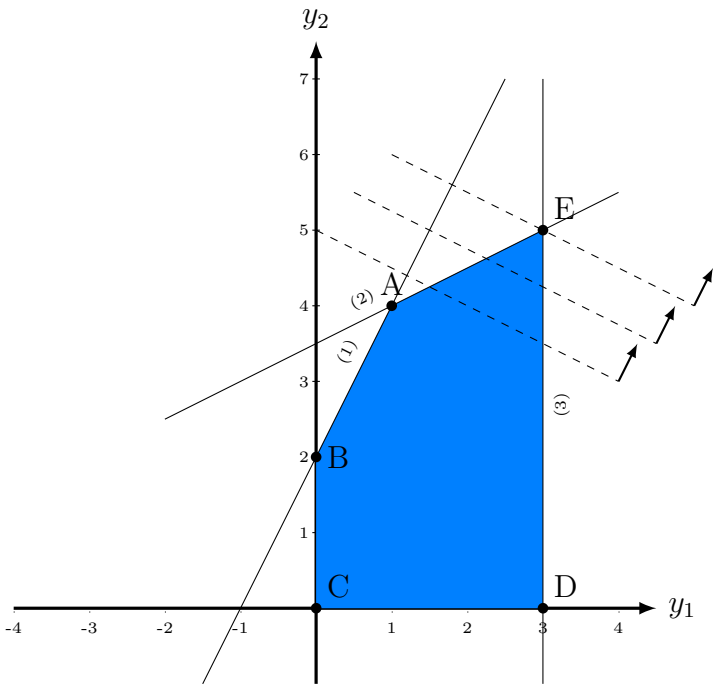

```
\begin{tikzpicture}[scale=0.8]
  \draw[-latex] (0, 0) -- (6, 0);
  \draw[-latex] (0, 0) -- (0, 4);
  \node at (6.3, 0) {$x_1$};
  \node at (0, 4.3) {$x_2$};
  \foreach \x in {0, ..., 5} {
    \draw (\x, 1pt) -- (\x, -3pt) node[anchor=north] {\x};
  }
  \foreach \y in {0, ..., 3} {
    \draw (1pt, \y) -- (-3pt, \y) node[anchor=east] {\y};
  }
  \draw[
    fill=gray,
    opacity=0.3
  ] (0, 0) -- (0, 5/6) -- (2.5, 2.5) --(5, 0) -- cycle;
  \draw[
    pattern=vertical lines
  ] (0, 0) -- (0, 5/6) -- (7/4, 2)-- (3, 2) --(5, 0) -- cycle;

  \draw (5, 0) -- (2, 3);
  \draw (0, 5/6) -- (3, 17/6);
  \node at (2, 3.5) {$x_1 + x_2 = 5$};
  \node at (4.6, 2.7) {$-4x_1 + 6x_2 = 5$};
  \draw (0, 2) -- (4.5, 2);
  \node at (5.2, 2) {$x_2 = 2$};
  \draw (0, 3) -- (4.5, 3);
  \node at (5.2, 3.2) {$x_2 = 3$};
\end{tikzpicture}
```

Figure 13: `domain-13.tex`: Feasible set with pattern



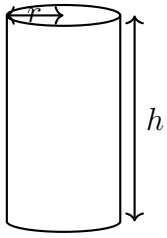

```
\begin{tikzpicture}[scale=0.8]
  \draw[->] (0, 0) -- (6, 0);
  \draw[->] (0, 0) -- (0, 4);
  \node at (6.3, 0) {$x_1$};
  \node at (0, 4.3) {$x_2$};

  \foreach \x in {0, ..., 5} {
    \draw (\x, 1pt) -- (\x, -3pt) node[anchor=north] {\x};
  }
  \foreach \y in {0, ..., 3} {
    \draw (1pt, \y) -- (-3pt, \y) node[anchor=east] {\y};
  }
  \draw[
    fill=gray,
    opacity=0.3
  ] (0, 0) -- (0, 5/6) -- (2.5, 2.5) --(5, 0) -- cycle;
  \draw[
    pattern=vertical lines
  ] (2, 0) -- (2, 2) -- (3, 2)-- (5, 0) -- cycle;

  \draw (5, 0) -- (2, 3);
  \draw (0, 5/6) -- (3, 17/6);
  \node at (2, 3.5) {$x_1+x_2=5$};
  \node at (4.7, 2.7) {$-4x_1+6x_2=5$};
  \draw (0, 2) -- (4.5, 2);
  \node at (5.2, 2) {$x_2=2$};
  \draw (2, 0) -- (2, 2.5);
  \node at(1.3, 2.7) {$x_1=2$};
\end{tikzpicture}
```

Figure 14: `domain-14.tex`: Feasible set with pattern



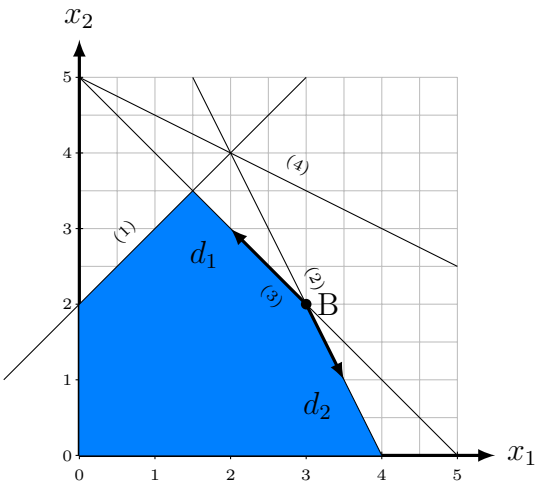

```
\begin{tikzpicture}
  \draw[very thick, -latex] (0, 1) coordinate(x1) -- (8.5, 1) coordinate(x2) node[right] {$y_1$};
  \draw[very thick, -latex] (4, 0) coordinate(y1) -- (4, 8.5) coordinate(y2) node[above] {$y_2$};
  \foreach \x in {-4, ..., -1} {
    \draw (\x+4, 0.95) -- (\x+4, 0.95) node[below] {\tiny\x};
  }
  \foreach \x in {1, ..., 4} {
    \draw (\x+4, 0.95) -- (\x+4, 0.95) node[below] {\tiny\x};
  }
  \foreach \y in {1, ..., 7} {
    \draw (3.95, \y+1) -- (4.05, \y+1) node[left] {\tiny\y};
  }
  \fill[blue!50!cyan, opacity=0.3] (4, 1) -- (4, 3) -- (5, 5) -- (7, 6) -- (7, 1) -- cycle;
  \draw (2.5, 0) coordinate (a1) --
    node[above right, sloped] {\tiny $(1)$} (6.5, 8) coordinate (a2);

  \draw (2, 3.5) coordinate (b1) --
    node[above left, sloped] {\tiny $(2)$} (8, 6.5) coordinate (b2);

  \draw (7, 0) coordinate (c1) --
    node[below left, sloped] {\tiny $(3)$} (7, 8) coordinate (c2);

  \coordinate (v1) at (intersection of a1--a2 and b1--b2);
  \coordinate (v2) at (intersection of a1--a2 and y1--y2);
  \coordinate (v3) at (intersection of x1--x2 and y1--y2);
  \coordinate (v4) at (intersection of x1--x2 and c1--c2);
  \coordinate (v5) at (intersection of b1--b2 and c1--c2);
  \fill[black] (v1) node[above] {A} circle (2pt);
  \fill[black] (v2) node[right] {B} circle (2pt);
  \fill[black] (v3) node[above right] {C} circle (2pt);
  \fill[black] (v4) node[above right] {D} circle (2pt);
  \fill[black] (v5) node[above right] {E} circle (2pt);

  \draw[dashed] (4, 6) coordinate (b1) -- (8, 4) coordinate (b2);
  \draw[dashed] (4.5, 6.5) coordinate (b1) -- (8.5, 4.5) coordinate (b2);
  \draw[dashed] (5, 7) coordinate (b1) -- (9, 5) coordinate (b2);

  \draw[-latex, thick] (8, 4)--(8.25, 4.5);
  \draw[-latex, thick] (8.5, 4.5)--(8.75, 5);
  \draw[-latex, thick] (9, 5)--(9.25, 5.5);
\end{tikzpicture}
```

Figure 15: `domain-15.tex`: Polygon with level lines and vertices



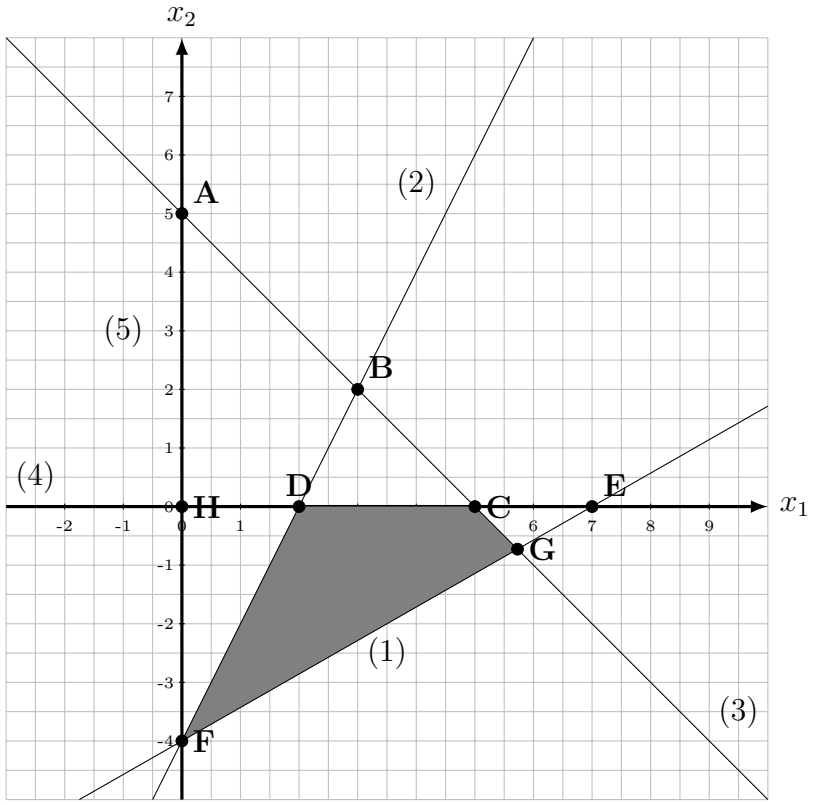

```
\begin{tikzpicture}[thick]
  \node (a) [
    cylinder,
    shape border rotate=90,
    draw,
    minimum height=30mm,
    minimum width=15mm
  ] {};
  \draw [<->] ([xshift=5pt] a.before bottom) --
              ([xshift=5pt] a.after top)
    node [midway, right] {$h$};
  \coordinate (center) at ($(a.before top)!0.5!(a.after top)$);
  \draw [<->] (a.before top) -- (center) node [midway] {$r$};
\end{tikzpicture}
```

Figure 16: `domain-16.tex`: Cylinder



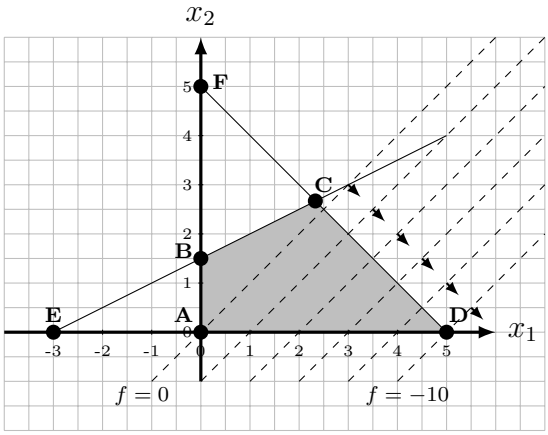

```
\begin{tikzpicture}
  \draw[gray!50, thin, step=0.5] (0, 0) grid (5, 5);
  \draw[very thick, -latex] (0, 0) coordinate(x1) -- (5.5, 0) coordinate(x2) node[right] {$x_1$};
  \draw[very thick, -latex] (0, 0) coordinate(y1) -- (0, 5.5) coordinate(y2) node[above] {$x_2$};
  \foreach \x in {0, ..., 5} {
    \draw (\x, 0.05) -- (\x, -0.05) node[below] {\tiny\x};
  }
  \foreach \y in {0, ..., 5} {
    \draw (-0.05, \y) -- (0.05, \y) node[left] {\tiny\y};
  }
  \fill[blue!50!cyan, opacity=0.3] (0, 0) -- (0, 2) -- (1.5, 3.5) -- (3, 2) -- (4, 0) -- cycle;
  \draw (-1, 1) coordinate (a1) -- node[above left, sloped] {\tiny $(1)$} (3, 5) coordinate (a2);
  \draw (1.5, 5) coordinate (b1) -- node[above right, sloped] {\tiny $(2)$} (4, 0) coordinate (b2);
  \draw (0, 5) coordinate (c1) -- node[below right, sloped] {\tiny $(3)$} (5, 0) coordinate (c2);
  \draw (5, 2.5) coordinate (d1) -- node[above right, sloped] {\tiny $(4)$} (0, 5) coordinate (d2);
  \draw[very thick, -latex] (3, 2) -- (2, 3) node[below left] {$d_1$};
  \draw[very thick, -latex] (3, 2) -- (3.5, 1) node[below left] {$d_2$};
  \coordinate (v4) at (intersection of b1--b2 and c1--c2);
  \fill[black] (v4) node[right] {B} circle (2pt);
\end{tikzpicture}
```

Figure 17: `domain-17.tex`: Grid and intersection




```
\begin{tikzpicture}[scale=0.775]
  \draw[gray!50, thin, step=0.5] (-3, -5) grid (10, 8);
  \draw[very thick, -latex] (-3, 0) coordinate(x1) -- (10, 0) coordinate(x2) node[right] {$x_1$};
  \draw[very thick, -latex] (0, -5) coordinate(y1) -- (0, 8) coordinate(y2) node[above] {$x_2$};
  \foreach \x in {-2, ..., 9} {
    \draw (\x, 0.05) -- (\x, -0.05) node[below] {\tiny\x};
    }
  \foreach \y in {-4, ..., 7} {
    \draw (-0.05, \y) -- (0.05, \y) node[left] {\tiny\y};
  }
  \fill[gray, opacity=0.4] (0, -4) -- (63/11, -8/11) -- (5, 0) -- (2, 0) -- cycle;
  \draw (10, 12/7) -- (-7/4, -5);
  \draw (-1/2, -5) -- (6, 8);
  \draw (10, -5) -- (-3, 8);
  \node at (4, 5.5){(2)};
  \node at (3.5, -2.5){(1)};
  \node at (9.5, -3.5){(3)};
  \node at (-2.5, 0.5){(4)};
  \node at (-1, 3){(5)};

  \draw [draw=black, fill=black] (0, 5) circle (0.1) node[anchor=south west] {\textbf{A}};
  \draw [draw=black, fill=black] (3, 2) circle (0.1) node[anchor=south west] {\textbf{B}};
  \draw [draw=black, fill=black] (5, 0) circle (0.1) node[anchor=west] {\textbf{C}};
  \draw [draw=black, fill=black] (2, 0) circle (0.1) node[anchor=south] {\textbf{D}};
  \draw [draw=black, fill=black] (7, 0) circle (0.1) node[anchor=south west] {\textbf{E}};
  \draw [draw=black, fill=black] (0, -4) circle (0.1) node[anchor=west] {\textbf{F}};
  \draw [draw=black, fill=black] (63/11, -8/11) circle (0.1) node[anchor=west] {\textbf{G}};
  \draw [draw=black, fill=black] (0, 0) circle (0.1) node[anchor=west] {\textbf{H}};
\end{tikzpicture}
```

Figure 18: `domain-18.tex`: Complex domain with vertices




```
\begin{tikzpicture}[scale=0.65]
  \fill[gray!50] (0, 0) -- (0, 1.5) -- (7/3, 8/3) -- (5, 0) -- cycle;
  \draw[gray!50, thin, step=0.5] (-4, -2) grid (7, 6);
  \draw[very thick, -latex] (-4, 0) coordinate(x1) -- (6, 0) coordinate(x2) node[right] {$x_1$};
  \draw[very thick, -latex] (0, -1) coordinate(y1) -- (0, 6) coordinate(y2) node[above] {$x_2$};
  \foreach \x in {-3, ..., 5} {
    \draw (\x, 0.05) -- (\x, -0.05) node[below] {\tiny\x};
  }
  \foreach \y in {0, ..., 5} {
    \draw (-0.05, \y) -- (0.05, \y) node[left] {\tiny\y};
  }
  \draw (0, 5) coordinate (a1) -- node[above left, sloped] {} (5, 0) coordinate (a2) ;
  \draw (-3, 0) coordinate (b1) -- node[above right, sloped] {} (5, 4) coordinate (b2);
  \draw[dashed] (-1, -1) -- (6, 6);
  \draw[dashed] (0, -1) -- (7, 6);
  \draw[dashed] (1, -1) -- (7, 5);
  \draw[dashed] (2, -1) -- (7, 4);
  \draw[dashed] (3, -1) -- (7, 3);
  \draw[dashed] (4, -1) -- (7, 2);
  \node at (0, 0) [circle, fill, inner sep=2pt] {};
  \node at (0, 1.5) [circle, fill, inner sep=2pt] {};
  \node at (0, 5) [circle, fill, inner sep=2pt] {};
  \node at (-3, 0) [circle, fill, inner sep=2pt] {};
  \node at (2.33, 2.67) [circle, fill, inner sep=2pt] {};
  \node at (5, 0) [circle, fill, inner sep=2pt] {};
  \node at (-0.35, 0.35) {\scriptsize{\textbf{A}}};
  \node at (-0.35, 1.65) {\scriptsize{\textbf{B}}};
  \node at (2.5, 3) {\scriptsize{\textbf{C}}};
  \node at (5.25, 0.35) {\scriptsize{\textbf{D}}};
  \node at (-3, 0.35) {\scriptsize{\textbf{E}}};
  \node at (0.4, 5.1) {\scriptsize{\textbf{F}}};
  \node at (-1.2, -1.3) {\scriptsize{$f=0$}};
  \node at (4.2, -1.3) {\scriptsize{$f=-10$}};
  \draw[-latex, thick] (3, 3) -- (3.25, 2.75);
  \draw[-latex, thick] (3.5, 2.5) -- (3.75, 2.25);
  \draw[-latex, thick] (4.0, 2.0) -- (4.25, 1.75);
  \draw[-latex, thick] (4.5, 1.5) -- (4.75, 1.25);
  \draw[-latex, thick] (5.0, 1.0) -- (5.25, 0.75);
  \draw[-latex, thick] (5.5, 0.5) -- (5.75, 0.25);
\end{tikzpicture}
```

Figure 19: `domain-19.tex`: Domain with level lines

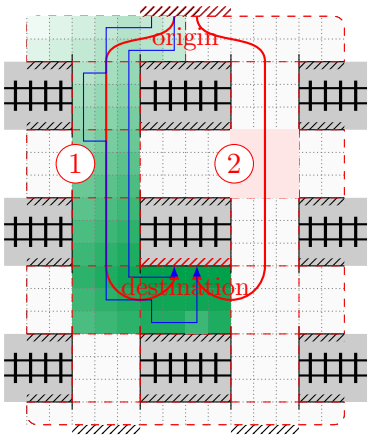


Figure 20: `domain-20.tex`: Complex map