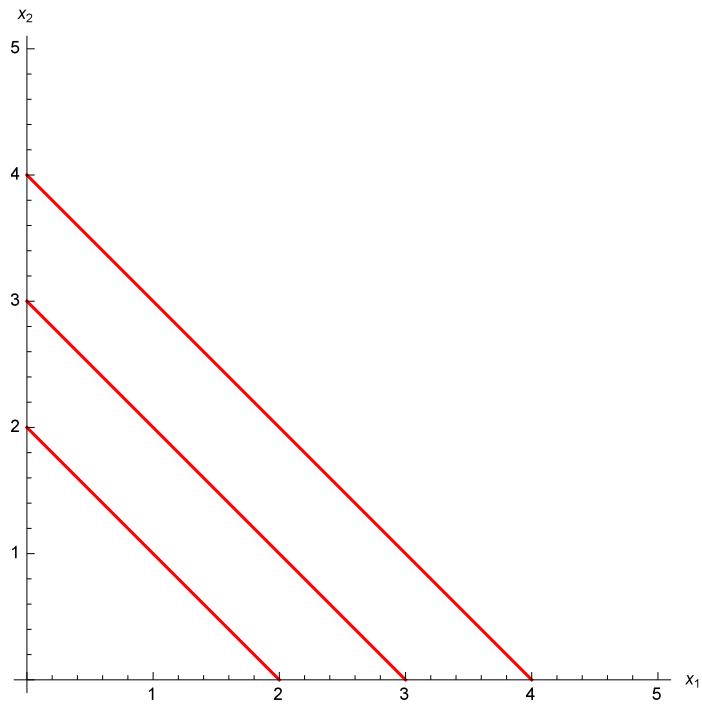


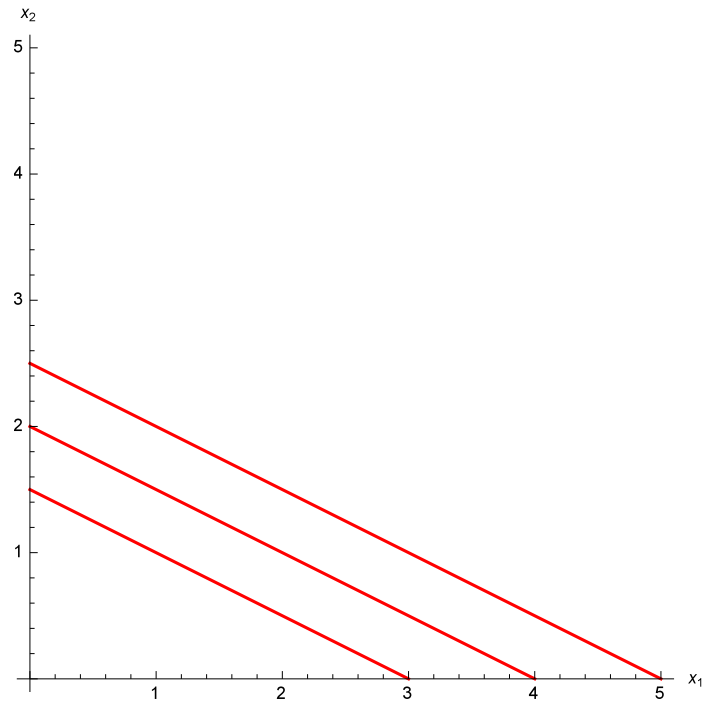
$Ua[x1_ , x2_] := x1 + x2$

```
ContourPlot[{Ua[x1, x2] == 2, Ua[x1, x2] == 3, Ua[x1, x2] == 4},  
{x1, 0, 5}, {x2, 0, 5}, ContourStyle -> {Red, Red, Red},  
Axes -> True,  
AxesLabel -> {Subscript[x, 1], Subscript[x, 2]}, Frame -> False]
```



$Ub[x1_ , x2_] := x1 + 2 * x2$

```
ContourPlot[{Ub[x1, x2] == 3, Ub[x1, x2] == 4, Ub[x1, x2] == 5},  
{x1, 0, 5}, {x2, 0, 5}, ContourStyle -> {Red, Red, Red},  
Axes -> True,  
AxesLabel -> {Subscript[x, 1], Subscript[x, 2]}, Frame -> False]
```



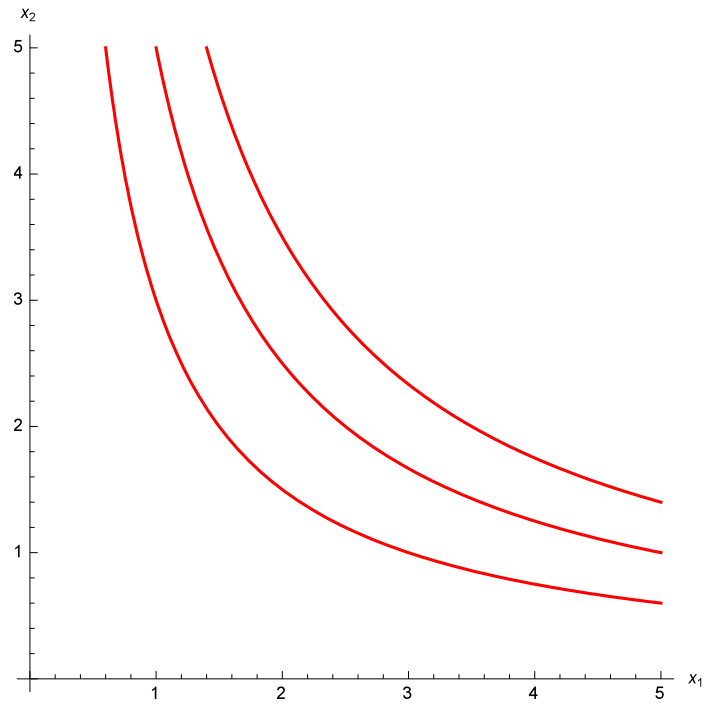
```
Uc[x1_, x2_] := x1 * x2
```

```
ContourPlot[{Uc[x1, x2] == 3, Uc[x1, x2] == 5, Uc[x1, x2] == 7},
```

```
{x1, 0, 5}, {x2, 0, 5}, ContourStyle -> {Red, Red, Red},
```

```
Axes -> True,
```

```
AxesLabel -> {Subscript[x, 1], Subscript[x, 2]}, Frame -> False]
```



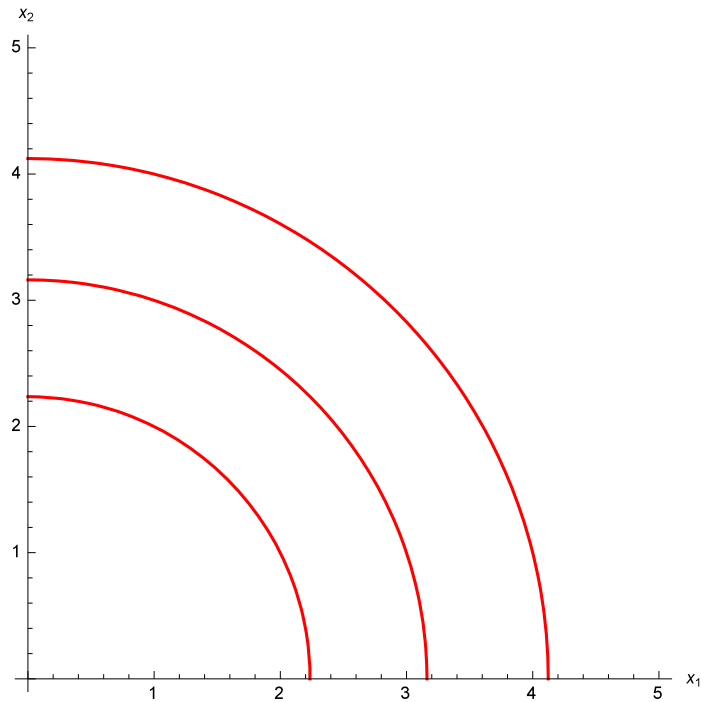
```
Ud[x1_, x2_] := x1^2 + x2^2
```

```
ContourPlot[{Ud[x1, x2] == 5, Ud[x1, x2] == 10, Ud[x1, x2] == 17},
```

```
{x1, 0, 5}, {x2, 0, 5}, ContourStyle -> {Red, Red, Red},
```

```
Axes -> True,
```

```
AxesLabel -> {Subscript[x, 1], Subscript[x, 2]}, Frame -> False]
```



`Solve[4 == -(1/4) * 1 + b, b]`

`{{b -> 17/4}}`

`Solve[Sqrt[17/2] == -1 * Sqrt[17/2] + b, b]`

`{{b -> Sqrt[34]}}`

`Solve[1 == -4 * 4 + b, b]`

`{{b -> 17}}`

`ContourPlot[{Ud[x1, x2] == 17,`

`x2 == -(1/4) * x1 + 17/4, x2 == -1 * x1 + Sqrt[34], x2 == -4 * x1 + 17},`

`{x1, 0, 5}, {x2, 0, 5}, ContourStyle -> {Red, Black, Black, Black},`

`Axes -> True,`

`AxesLabel -> {Subscript[x, 1], Subscript[x, 2]}, Frame -> False]`

