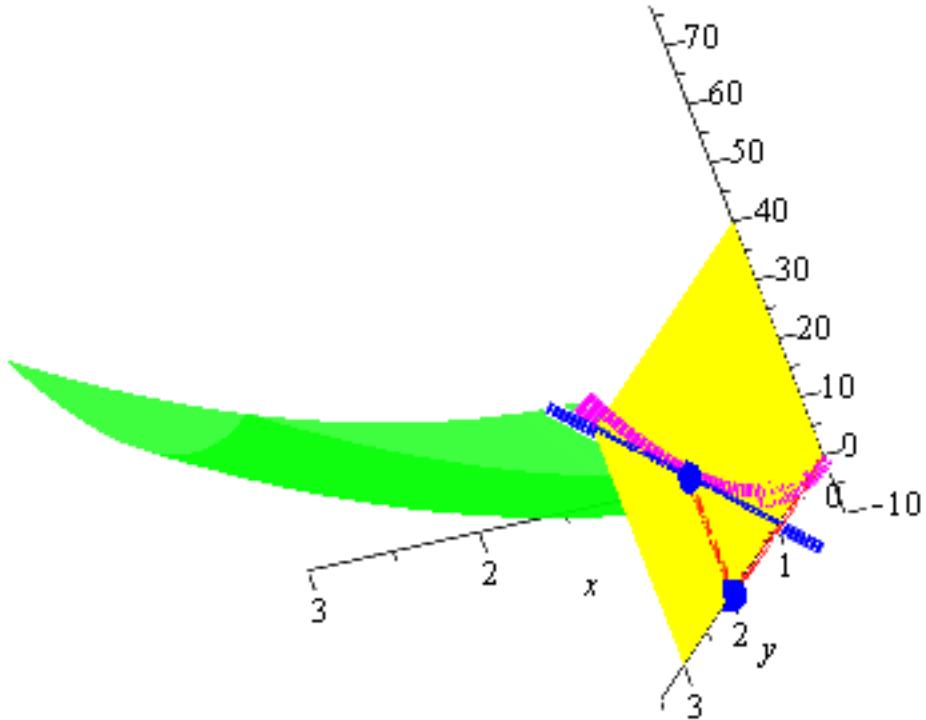


```

with(plots) : with(plottools) :
a := plot3d( $3 \cdot x^2 + 5 \cdot y^2$ ,  $x = 0 .. 3$ ,  $y = 0 .. 3$ , transparency = 0.5, color = green, style = patchnogrid) :
b := animate(plot3d, [[A, x, y],  $x = 0 .. 3$ ,  $y = 0 .. 40$ , color = yellow, style = patchnogrid], A = 0 .. 3) :
c := animate(pointplot3d, [[A, 2,  $20 + 3 \cdot A^2$ ], symbol = solidcircle, symbolsize = 30, color = blue], A = 0 .. 3) :
d := animate(pointplot3d, [[A, 2, 0], symbol = solidcircle, symbolsize = 30, color = blue], A = 0 .. 3) :
e := animate(spacecurve, [[A · t, 2, 0],  $t = 0 .. 1$ , color = red, thickness = 5], A = 0 .. 3) :
f := animate(spacecurve, [[A, t, 0],  $t = 0 .. 2$ , color = red, thickness = 5], A = 0 .. 3) :
g := animate(spacecurve, [[A, 2,  $t \cdot (20 + 3 \cdot A^2)$ ],  $t = 0 .. 1$ , color = red, thickness = 5], A = 0 .. 3) :
h := animate(spacecurve, [[A, 3 · t,  $45 \cdot t^2 + 3 \cdot A^2$ ],  $t = 0 .. 1$ , thickness = 15, color = magenta], A = 0 .. 3) :
j := animate(spacecurve, [[A, 2 + 3 · t,  $20 + 3 \cdot A^2 + 60 \cdot t$ ],  $t = -\frac{1}{2} .. \frac{1}{2}$ , color = blue, thickness = 5], A = 0 .. 3) :
display(a, b, c, d, e, f, g, h, j, axes = normal)

```

$$A = 0.$$



```

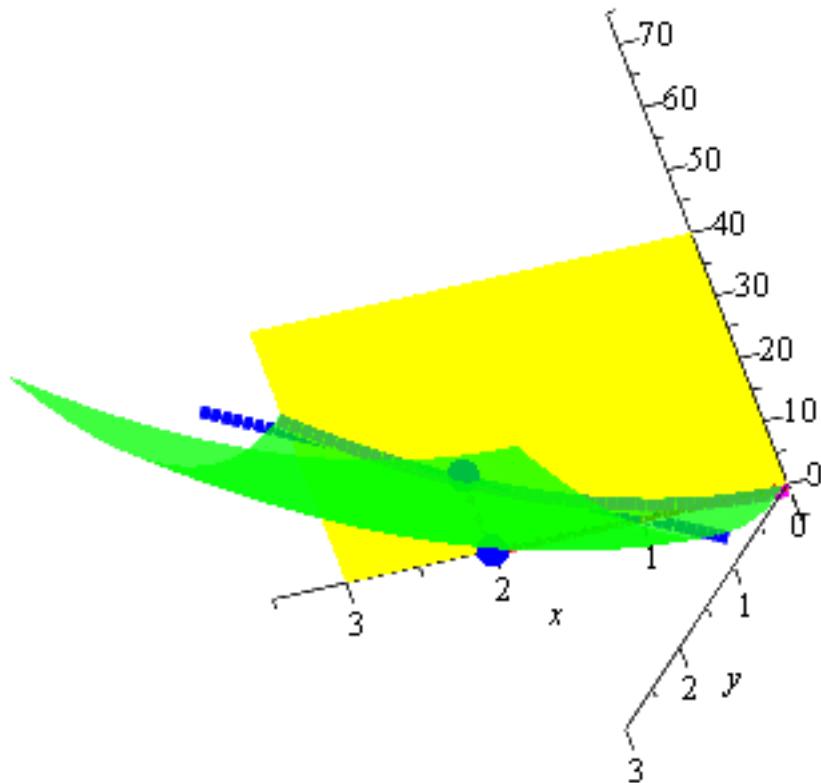
with(plots) : with(plottools) :
a1 := plot3d( $3 \cdot x^2 + 5 \cdot y^2$ ,  $x = 0 .. 3$ ,  $y = 0 .. 3$ , transparency = 0.5, color = green, style = patchnogrid) :
b1 := animate(plot3d, [[x, A, y],  $x = 0 .. 3$ ,  $y = 0 .. 40$ , color = yellow, style = patchnogrid], A = 0 .. 3) :

```

```

c1 := animate(pointplot3d, [[2, A, 12 + 5·A2], symbol=solidcircle, symbolsize=30, color=blue], A = 0 .. 3) :
d1 := animate(pointplot3d, [[2, A, 0], symbol=solidcircle, symbolsize=30, color=blue], A = 0 .. 3) :
e1 := animate(spacecurve, [[2, A·t, 0], t = 0 .. 1, color=red, thickness=5], A = 0 .. 3) :
f1 := animate(spacecurve, [[t, A, 0], t = 0 .. 2, color=red, thickness=5], A = 0 .. 3) :
g1 := animate(spacecurve, [[2, A, t·(12 + 5·A2)], t = 0 .. 1, color=red, thickness=5], A = 0 .. 3) :
h1 := animate(spacecurve, [[3·t, A, 27·t2 + 5·A2], t = 0 .. 1, thickness=15, color=magenta], A = 0 .. 3) :
j1 := animate(spacecurve, [[2 + 3·t, A, 12 + 5·A2 + 36·t], t = -1/2 .. 1/2, color=blue, thickness=5], A = 0 .. 3) :
display(a1, b1, c1, d1, e1, f1, g1, h1, j1, axes=normal)
A = 0.

```



```

display(a, b, c, d, e, f, g, h, j, a1, b1, c1, d1, e1, f1, g1, h1, j1, axes=normal)

```

$$A = 1.5000$$

