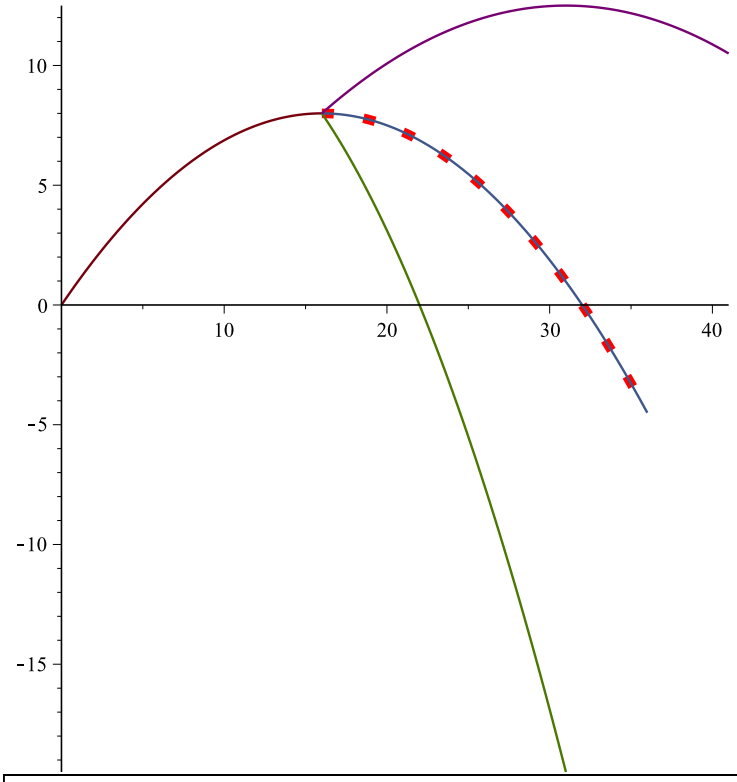
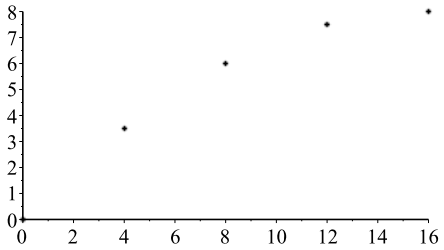
$$plot\left(\left\{\left[4\cdot t,\ 4\cdot t-\frac{t^2}{2},\ t=0..4\right],\left[16+5\cdot t,\ 8+3\cdot t-\frac{t^2}{2},\ t=0..5\right],\left[16+3\cdot t,\ 8-3\cdot t-\frac{t^2}{2},\ t=0..5\right],\left[4\cdot t,\ 4\cdot t-\frac{t^2}{2},\ t=4..9\right],\left[16+4\cdot t,\ 8-\frac{t^2}{2},\ t=0..5\right]\right\}\right)$$



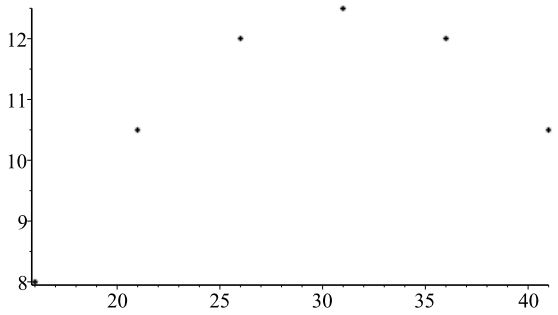
Path for particle 1 after explosion (t=5..9)
Path of the calculated center mass path
Path for particle 2 after explosion (t=5..9)
Path that the initial particle would follow if did not explode (t=5. .9)
Path of the initial particle for time (t=0..4)

So I have a pretty plot for the path with the legend that shows what each color path mean. But I computer would not let me use display function that maple has to put the point plots below on the same grapth as my path graph. I did everything according to the maple help website and this technique worked before (I used it in my previous courses). But now it deos not work. But the pointplot shows the position at each integer time (1,2,3...)

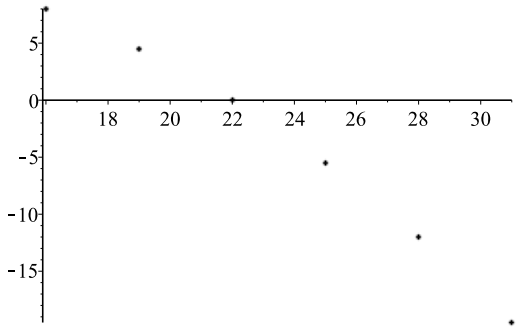
$$plots[pointplot]\left(\left[seq\left(\left[4\cdot t,\ 4\cdot t-\frac{t^2}{2}\right],\ t=0..4\right)\right]\right)$$ For the particle path before explotion



$$plots[pointplot]\left(\left[seq\left(\left[16+5\cdot t,\ 8+3\cdot t-\frac{t^2}{2}\right],\ t=0..5\right)\right]\right)$$ For the 1st particle path after explotion



$$plots[pointplot]\left(\left[seq\left(\left[16+3\cdot t,\ 8-3\cdot t-\frac{t^2}{2}\right],\ t=0..5\right)\right]\right)$$ For the 2 particle path after explotion



$$A := plot\left(\left\{ \left[4\cdot t, 4\cdot t - \frac{t^2}{2}, t = 0..4 \right], \left[16 + 5\cdot t, 8 + 3\cdot t - \frac{t^2}{2}, t = 0..5 \right], \left[16 + 3\cdot t, 8 - 3\cdot t - \frac{t^2}{2}, t = 0..5 \right], \left[4\cdot t, 4\cdot t - \frac{t^2}{2}, t = 4..9 \right], \left[16 + 4\cdot t, 8 - \frac{t^2}{2}, t = 0..5 \right] \right\} \right) :$$

$$B := plots[pointplot]\left(\left[seq\left(\left[4\cdot t, 4\cdot t - \frac{t^2}{2} \right], t = 0..4 \right) \right] \right) :$$

$$C := plots[pointplot]\left(\left[seq\left(\left[16 + 5\cdot t, 8 + 3\cdot t - \frac{t^2}{2} \right], t = 0..5 \right) \right] \right) :$$

$$F := plots[pointplot]\left(\left[seq\left(\left[16 + 3\cdot t, 8 - 3\cdot t - \frac{t^2}{2} \right], t = 0..5 \right) \right] \right) :$$

```
with(plots) :
display ({A, F, C, B});
```

$$plots\text{:-}display\left\{PLOT(\ldots), PLOT(\ldots), PLOT(\ldots), PLOT(\ldots)\right\} \quad \textbf{(1)}$$

Above you can see that I did everything as it should be - it just does not put the picture... I tried really hard to make it happen...