

Strassen's idea

• Multiply 2×2 matrices with only 7 recursive mults.

$$P_{1} = a \cdot (f - h)$$

 $P_{2} = (a + b) \cdot h$
 $P_{3} = (c + d) \cdot e$
 $P_{4} = d \cdot (g - e)$
 $P_{5} = (a + d) \cdot (e + h)$
 $P_{6} = (b - d) \cdot (g + h)$
 $P_{7} = (a - c) \cdot (e + f)$