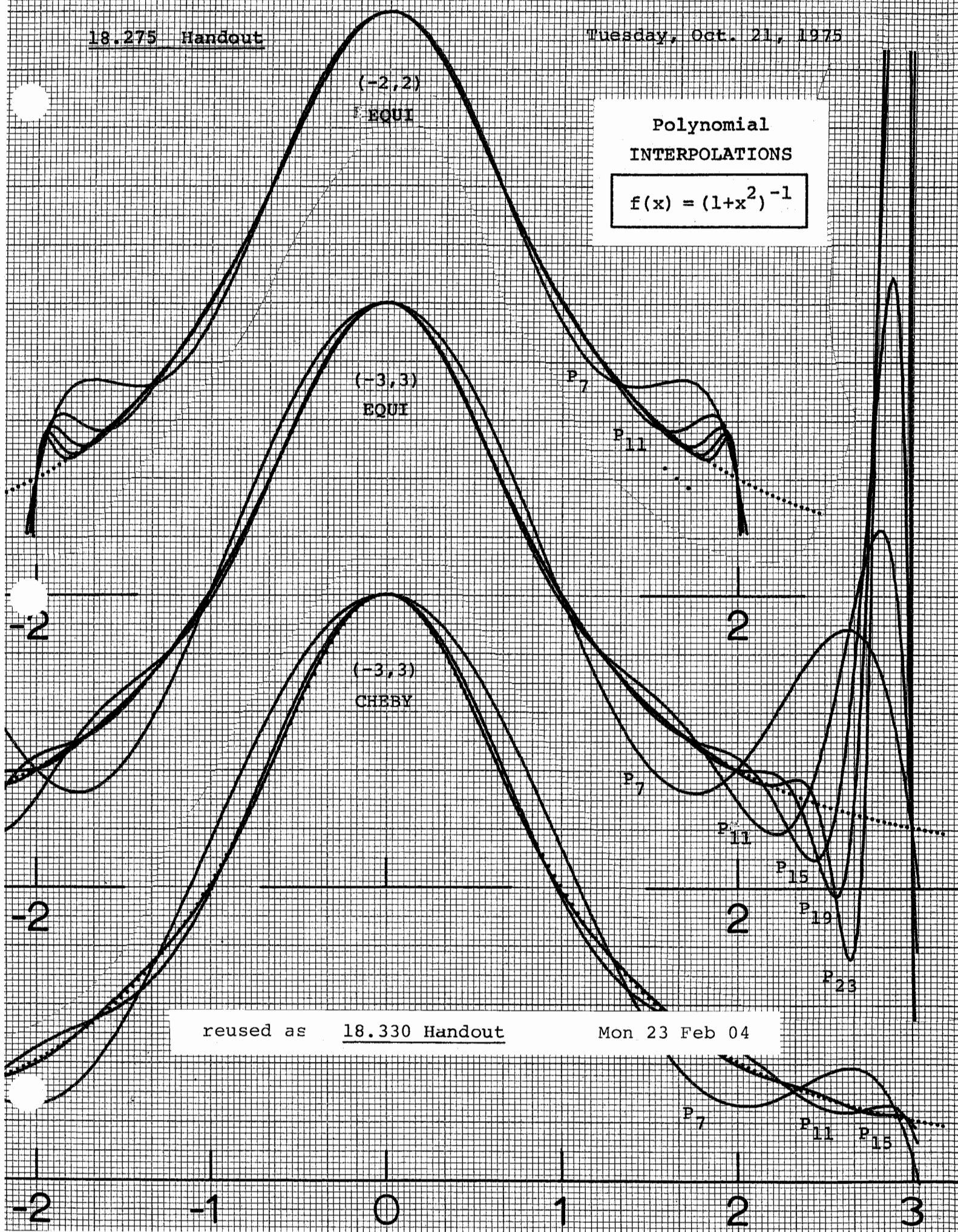


Polynomial INTERPOLATIONS

$f(x) = (1+x^2)^{-1}$



(-2, 2)  
EQUI

(-3, 3)  
EQUI

(-3, 3)  
CHEBY

P<sub>7</sub>

P<sub>11</sub>

P<sub>7</sub>

P<sub>11</sub>

P<sub>15</sub>

P<sub>19</sub>

P<sub>23</sub>

P<sub>7</sub>

P<sub>11</sub>

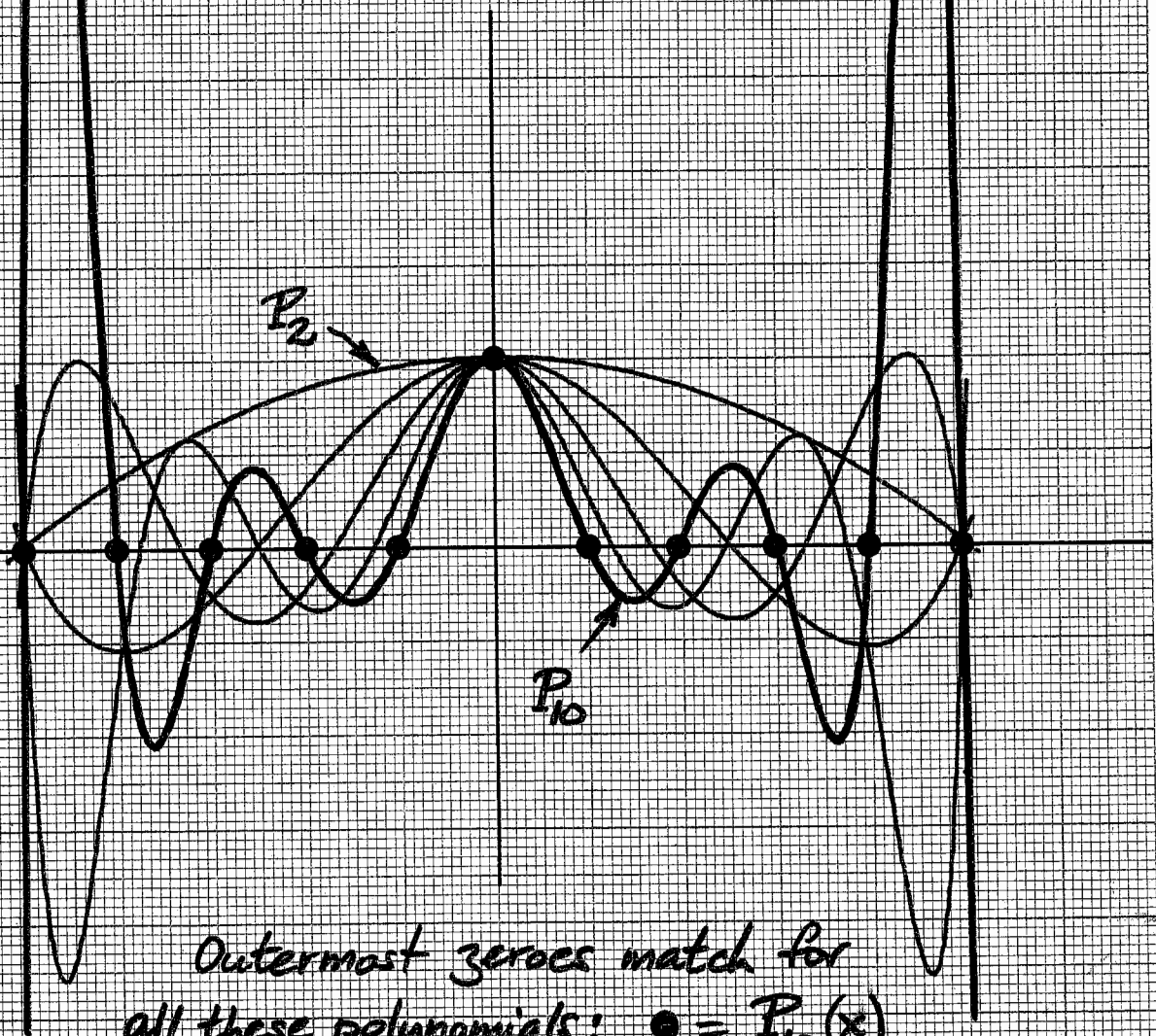
P<sub>15</sub>

reused as 18.330 Handout

Mon 23 Feb 04

Comparison of equispaced  
Lagrange interpolating  
polynomials

... all of even degree,  
and "plucked up" at  $x=0$



Outermost zeroes match for  
all these polynomials;  $\bullet = P_{10}(x)$