Name:	Exercise Type (Cost):
J#:	**In-Class (1AP)**
Date: **2017 June 16**	

Standard: This student is able to...	Mark:
S05: PartFrac. Use partial fractions to integrate rational functions.	
3/3 ⋆ reattempt due on:	

Give the partial fraction expansion of $\dfrac{f(x)}{x(x+1)^3(x^2+4)^2}$ in terms of the unknown constants A through H, assuming $f(x)$ is a polynomial of degree less than 8. Do not solve for A through H.

Name:	Exercise Type (Cost):
J#:	**In-Class (1AP)**
Date: **2017 June 16**	

Standard: This student is able to...	Mark:
C04: IntParts. Use integration by parts.	
2/4 ⋆ reattempt due on:	

Find $\int 8\sin(x)\cosh(x)\,dx$. (Note that one factor is trigonometric sine, the other is hyperbolic cosine, so integration by parts is in fact necessary.)

Name:	Exercise Type (Cost):
J#:	**In-Class (1AP)**
Date: **2017 June 16**	

Standard: This student is able to...	Mark:
C05: IntTech. Identify appropriate integration techniques.	
1/4 ⋆ reattempt due on:	

Draw lines matching each of the five integrals on the left with the most appropriate integration technique listed on the right. Multiple techniques may be technically possible, but choose the technique most useful to begin integration. Every integral and technique is used exactly once in the correct answer.

$$\int x\sin(x)\,dx$$

$$\int \cos^4(x)\,dx$$

$$\int \frac{1}{x\sqrt{x^2+1}}\,dx$$

$$\int \frac{4x}{3x^2-1}\,dx$$

$$\int \frac{7x^2+x+12}{x^3+3x}\,dx$$

- Integration by Substiution
- Method of Partial Fractions
- Trigonometric Identities
- Trigonometric Substitution
- Integration by Parts