

MATH 4305 - Ordinary Differential Equations II
Homework 5 - Inverse Laplace Transform
Due - Monday, November 2, 2015

Use the rules for Laplace transforms to determine the inverse Laplace transform of each function.

1. $F(s) = \frac{1}{s^3}$

2. $F(s) = \frac{4}{s+3}$

3. $F(s) = \frac{1}{(s-2)^4}$

4. $F(s) = \frac{1}{s^2+4}$

5. $F(s) = \frac{s}{(s+1)^2+9}$

6. $F(s) = \frac{s+3}{s^2-2s+5}$

7. $F(s) = \frac{1}{s^2-1}$

8. $F(s) = \frac{s+2}{s^3}$

9. $F(s) = \frac{s}{s^2+6s+10}$

10. $F(s) = \frac{5s-11}{s^2-3s-10}$

11. $F(s) = \frac{8s^2-s+10}{(s-2)(s^2+4)}$

12. $F(s) = \frac{2s-13}{s(s^2-4s+13)}$