

MATH 231, Inverse Laplace Transform Worksheet

Find the inverse Laplace transform for each function.

1.  $F(s) = \frac{e^{-\pi s/2}}{s^2 + 9}$

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

3.  $F(s) = \frac{s}{s^2 + 6s + 11}$

4.  $F(s) = e^{-s} \frac{s}{s^2 + 6s + 11}$

5.  $F(s) = \frac{1}{(s-1)^3} + \frac{1}{s^2 + 2s - 8}$

6.  $F(s) = e^{-2s} \frac{1}{(s-1)^3} + e^{-s} \frac{1}{s^2 + 2s - 8}$