

**WDSC 422 Homework – Assignment 2**  
**Machine Rate Applications**  
Harvesting Forest Products

Due

Calculate the cost per hour (\$/SMH and \$/PMH) for each of the following machines:

(1) Timbco 425D feller-buncher  
purchase price: \$115,000  
salvage value: 20%  
economic life: 4 years  
interest: 12%  
insurance: 7%  
taxes: 2%  
fuel usage: 3.15 gal/PMH  
lube usage: 1.93 qt/PMH  
fuel cost: 0.88/gal  
lube cost: 1.30/qt  
M&R: 80%  
Wages: 6.5/SMH  
fringes: 38%  
utilization: 75%

(2) John Deere 540B grapple skidder  
purchase price: \$95,000  
salvage value: 20%  
economic life: 5 years  
interest: 12%  
insurance: 7%  
taxes: 2%  
fuel usage: 3.38 gal/PMH  
lube usage: 0.93 qt/PMH  
fuel cost: 0.88/gal  
lube cost: 1.30/qt  
M&R: 90%  
Wages: 6.5/SMH  
fringes: 38%  
utilization: 68%