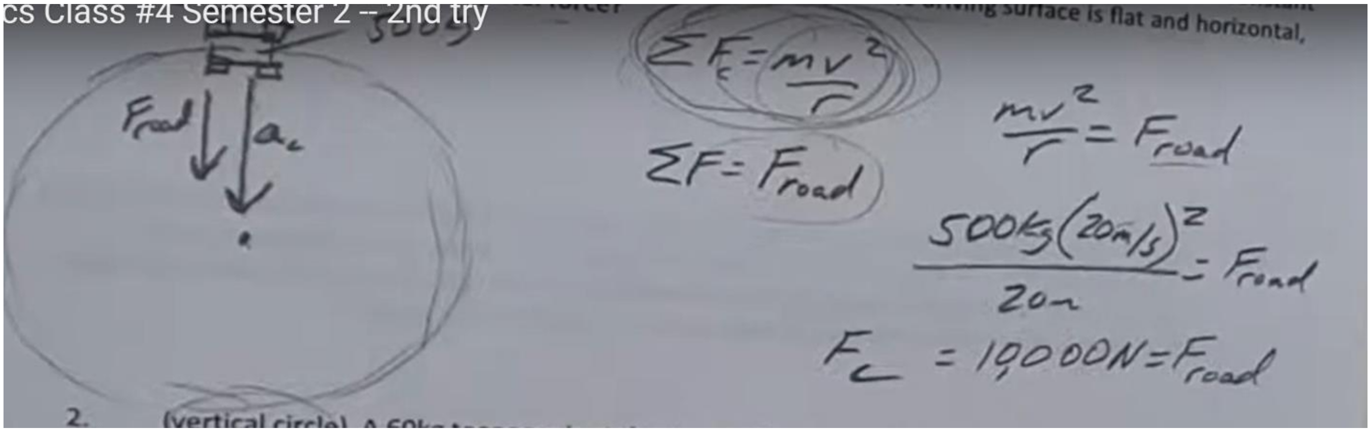
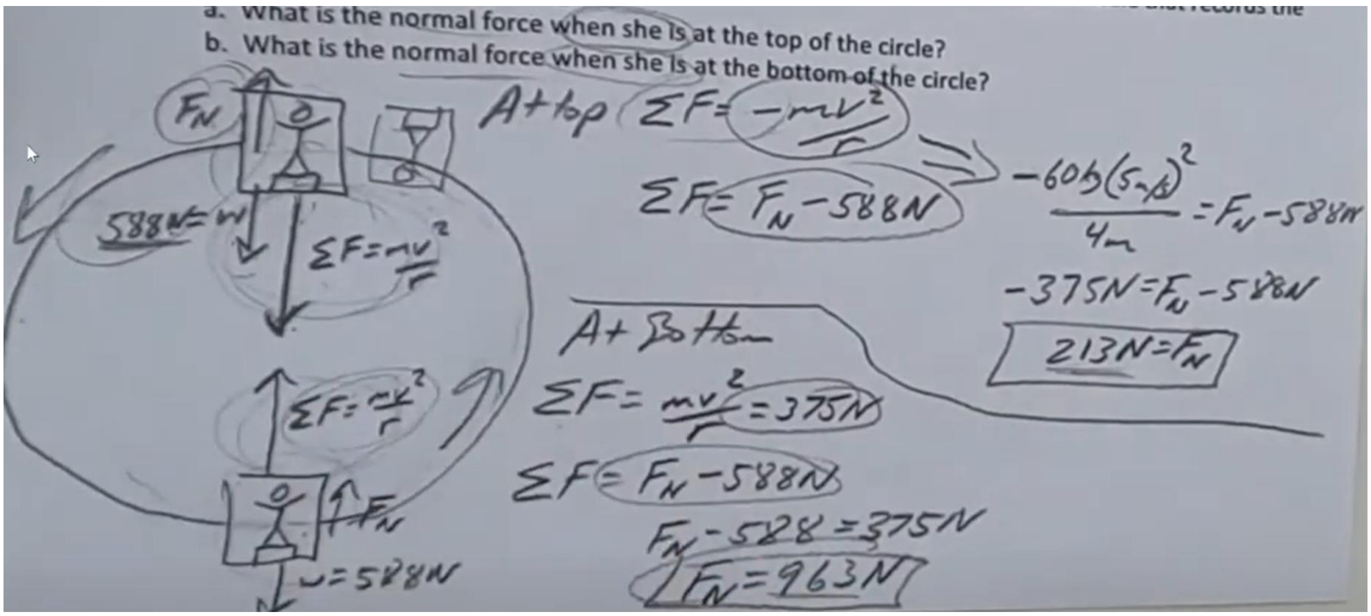

cs Class #4 Semester 2 -- 2nd try
...driving surface is flat and horizontal,
500g
Froad
ac
ΣFc = mv²/r
ΣF = Froad
mv²/r = Froad
500kg(20m/s)²/20m = Froad
Fc = 10,000N = Froad
2. (vertical circle) A 60kg...


a. What is the normal force when she is at the top of the circle?
b. What is the normal force when she is at the bottom of the circle?
FN
588N = w
ΣF = mv²/r
At top ΣF = −mv²/r
ΣF = FN − 588N
−60kg(5m/s)²/4m = FN − 588N
−375N = FN − 588N
213N = FN
At Bottom
ΣF = mv²/r = 375N
ΣF = FN − 588N
FN − 588 = 375N
FN = 963N
ΣF = mv²/r
FN
w = 588N