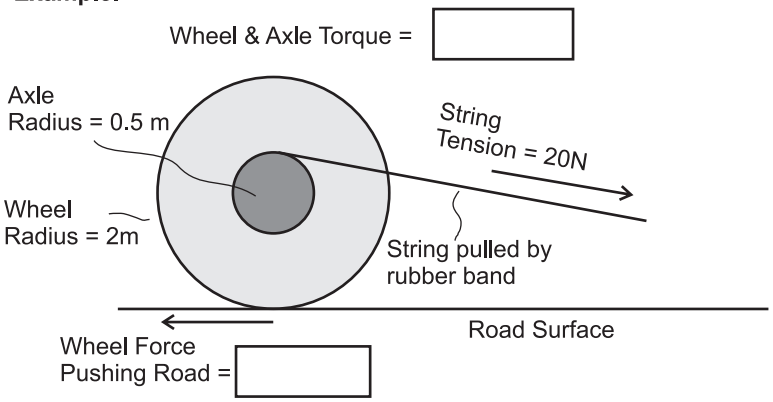
Physics 100 (Stapleton) Name: _____

Problems: Rubber Band Car Wheel and Axle Torque

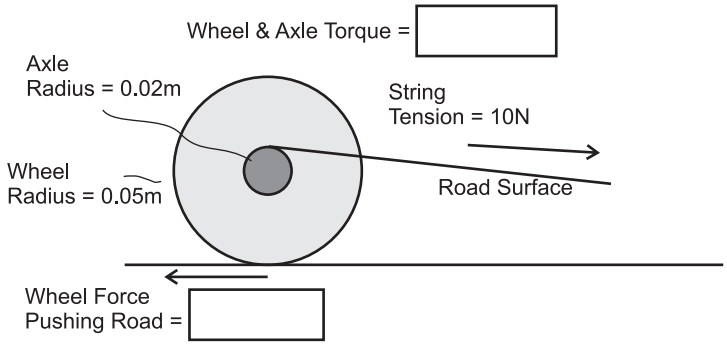
$T = fr$ $f =$ $r =$

Torque is the same at every point in a rotating body.

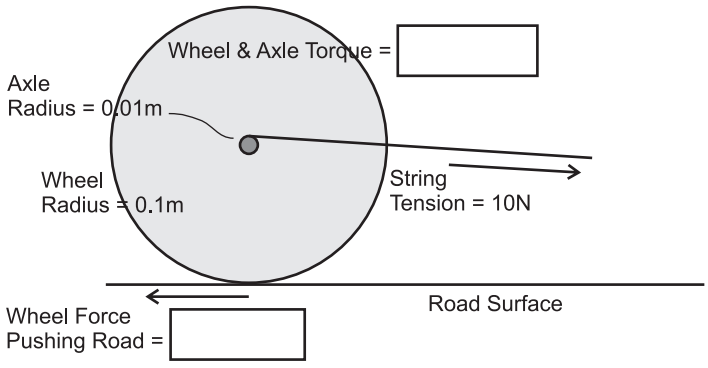
Example.



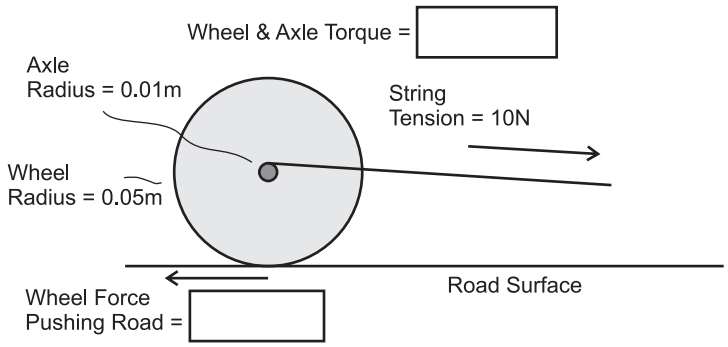
Problem 1.



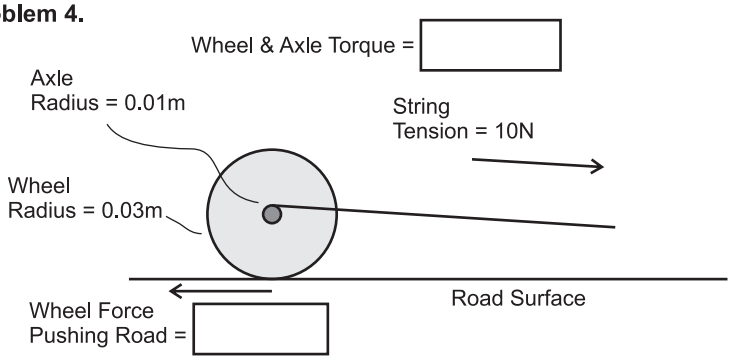
Problem 2.



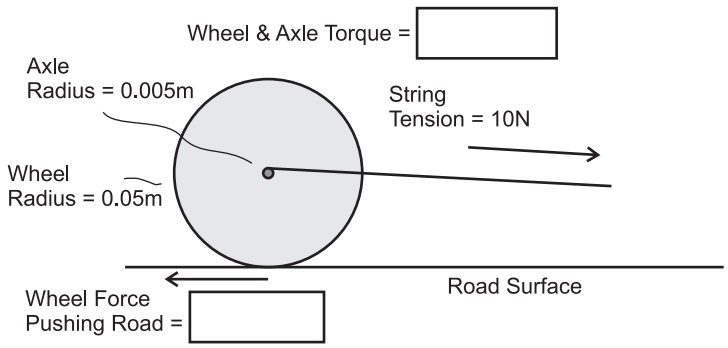
Problem 3.



Problem 4.



Problem 5.



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6. How are string tension and wheel/axle torque related? a) inversely b) directly c) neither

7. How are axle radius and wheel/axle torque related? a) inversely b) directly c) neither

8. How are wheel radius and wheel/axle torque related? a) inversely b) directly c) neither

9. How are wheel radius and “wheel force pushing road” related? a) inversely b) directly c) neither

10. How are wheel/axle torque and “wheel force pushing road” related? a) inversely b) directly c) neither