

Nom: _____ Réponses _____

Préquiz #4

On exerce une force $F = 70$ N sur la roue ci-dessous. Calculez le moment de force causé par F pour

(a) $r = 0.75$ m et $\theta = 0^\circ$, $\tau = rF\sin\theta = (0.75\text{m})(70\text{N})\sin(0) = 0$ Nm

(b) $r = 0.75$ m et $\theta = 30^\circ$, $\tau = rF\sin\theta = (0.75\text{m})(70\text{N})\sin(30) = 26$ Nm

(c) $r = 0.75$ m et $\theta = 60^\circ$, $\tau = rF\sin\theta = (0.75\text{m})(70\text{N})\sin(60) = 45$ Nm

(d) $r = 0.75$ m et $\theta = 90^\circ$, $\tau = rF\sin\theta = (0.75\text{m})(70\text{N})\sin(90) = 53$ Nm

(e) $r = 0.50$ m et $\theta = 60^\circ$, $\tau = rF\sin\theta = (0.50\text{m})(70\text{N})\sin(60) = 30$ Nm

(f) $r = 0.25$ m et $\theta = 60^\circ$, $\tau = rF\sin\theta = (0.25\text{m})(70\text{N})\sin(60) = 15$ Nm

