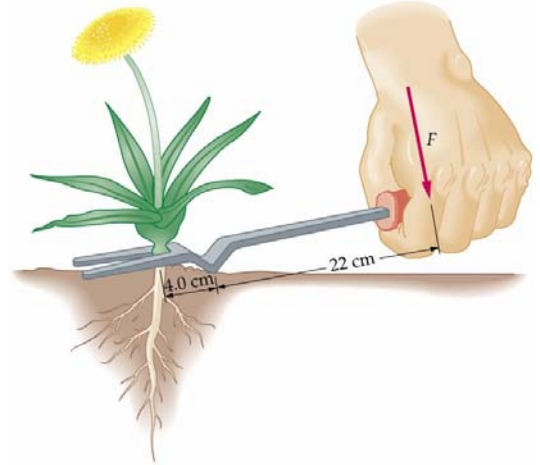


## Physics 151 Class Exercise: Torque 1

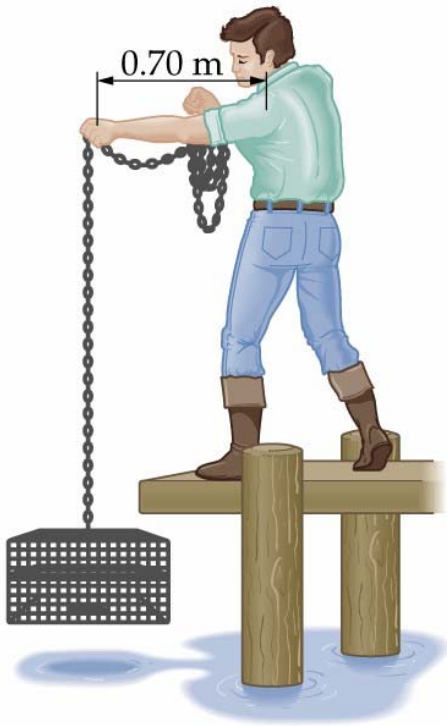
### 1. Straightforward Torque Problems

(a) The gardening tool shown here is used to pull weeds. If a  $1.23 \text{ N}\cdot\text{m}$  torque is required to pull a given weed, what force did the weed exert on the tool?



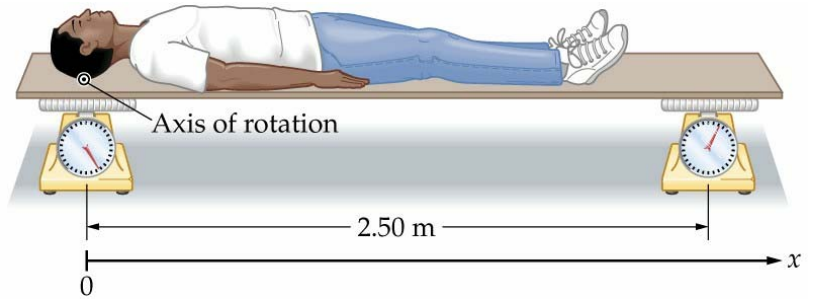
Answer:	
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(b) A person slowly lowers a  $3.3 \text{ kg}$  crab trap over the side of a dock as shown. What torque does the trap exert about the person's shoulders?



Answer:	
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2. To determine the location of this center of mass, a physics student lies on a lightweight plank supported by two scales 2.50 m apart as shown below. If the left scale reads 290 N, and the right scale reads 122N, find (a) the student's mass and (b) the distance from the student's head to his center of mass.



Answer:	
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Answer:	
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