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Free-body diagram showing forces:  $50(9.81) \text{ N}$  (down),  $P$  (left),  $R$  (up-right), and a horizontal distance of  $1 \text{ m}$  from the line of action of  $P$  to the vertical line of action of  $R$ . The reaction force  $R$  acts along a line of length  $4 \text{ m}$  at an angle  $\theta$  to the vertical.

$P = 50(9.81) \tan \theta$   
 $\sin \theta = 1/4$   
 $\tan \theta = 1/\sqrt{4^2 - 1^2} = 0.258$   
 $P = 50(9.81)(0.258) = \underline{126.6 \text{ N}}$

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