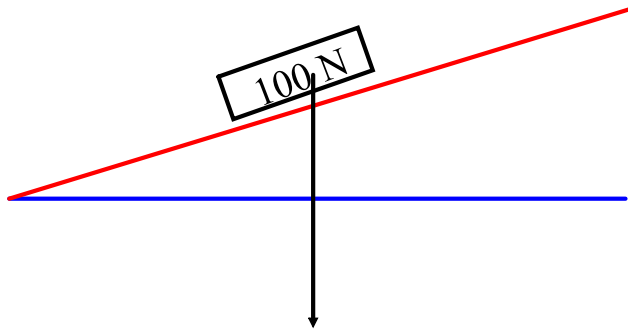


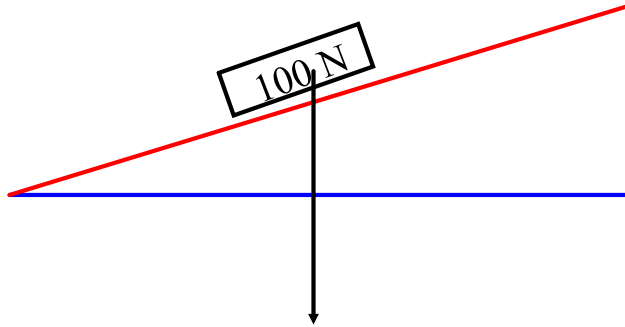
Oct 19-7:52 AM

A 100 N box is on a ramp that makes a 35 degree angle with the horizontal. The weight of the box acts straight down due to pull of gravity.



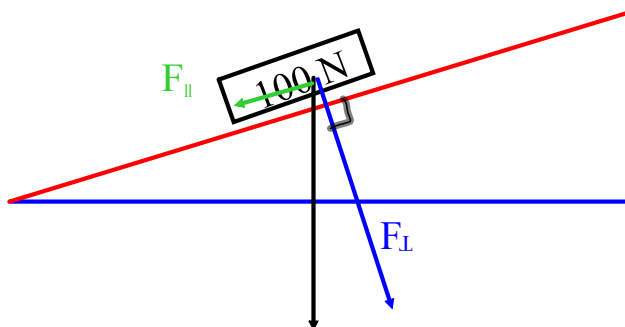
Oct 19-8:32 AM

A 100 N box is on a ramp that makes a 35 degree angle with the horizontal. The weight of the box acts straight down due to pull of gravity. What part of the box's weight acts **parallel to the ramp** (F_{\parallel}) and what part acts **perpendicular** (F_{\perp}) ?



Oct 19-11:14 AM

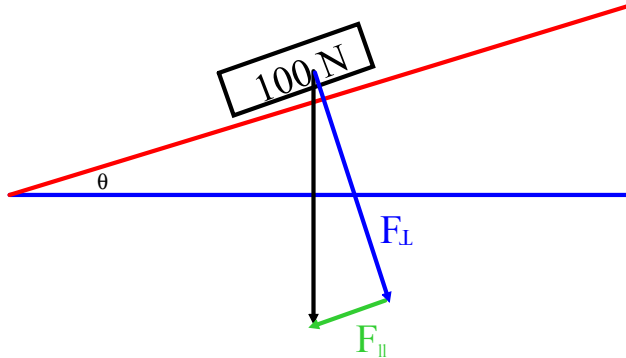
A 100 N box is on a ramp that makes a 35 degree angle with the horizontal. The weight of the box acts straight down due to pull of gravity. What part of the box's weight acts **parallel to the ramp** (F_{\parallel}) and what part acts **perpendicular** (F_{\perp}) ?



Note that F_{\parallel} and F_{\perp} are components of the weight of the box (100N) F_w . To add the components vectorally you would move the tail of F_{\parallel} down to the head at the head of F_{\perp}

Oct 19-11:18 AM

A 100 N box is on a ramp that makes a 35 degree angle with the horizontal. The weight of the box acts straight down due to pull of gravity. What part of the box's weight acts **parallel to the ramp** (F_{\parallel}) and what part acts **perpendicular** (F_{\perp}) ?



Note that F_{\parallel} and F_{\perp} are components of the weight of the box (100N) F_w . To add the components vectorally you would move the tail of F_{\parallel} down to the head at the head of F_{\perp}

Oct 19-11:22 AM

$F_{\parallel} = \sin 25^{\circ} (100\text{N})$
 $F_{\parallel} = 42\text{N}$

$F_{\perp} = \cos 25^{\circ} (100\text{N})$
 $F_{\perp} = 91\text{N}$

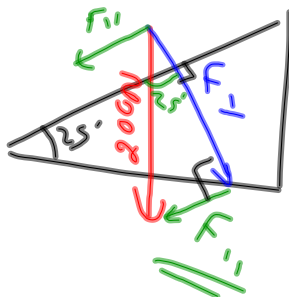
Oct 9-10:03 AM

a 200N box is on a 12m ramp that's 5m high.
 what is $F_{||}$ (how much of the box's weight acts down the ramp?)



$$\sin \theta = \frac{5m}{12m}$$

$$\theta = 25^\circ$$

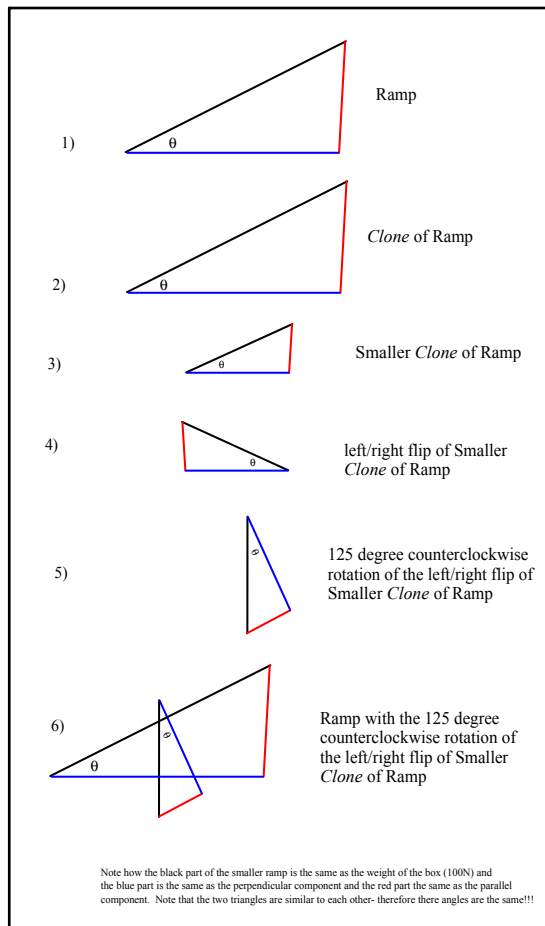


$$\sin 25^\circ = \frac{F_{||}}{200N}$$

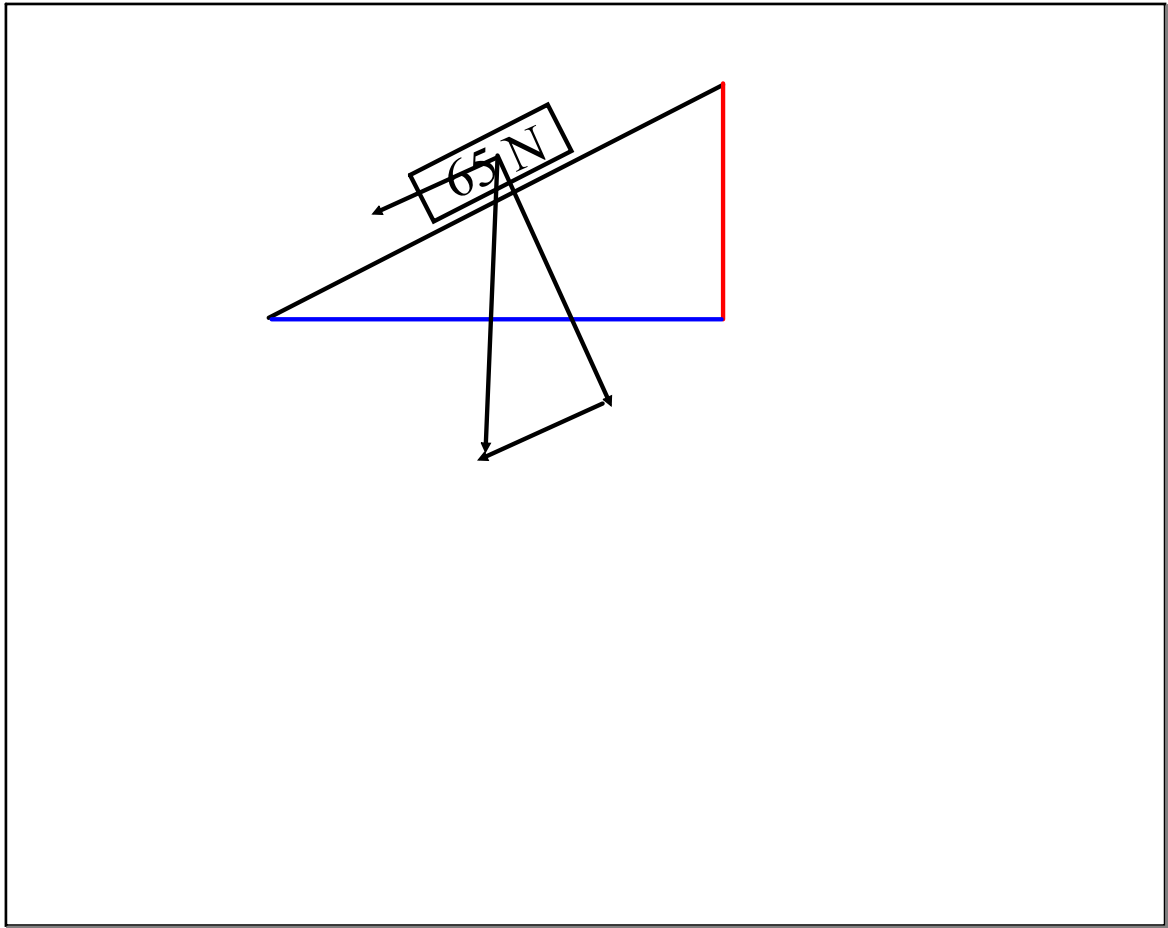
$$F_{||} = \sin 25^\circ (200N)$$

$$F_{||} = 85N$$

Oct 9-11:12 AM



Oct 19-7:52 AM



Oct 6-6:55 AM