

## Re: How to split (or combine) magnetic force?

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  - *Date:* Thu, 07 Dec 2006 00:21:40 GMT
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"Bert Harleman" <[bert@xxxxxxxxxxxxx](mailto:bert@xxxxxxxxxxxxx)> wrote in message  
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| There's a science quiz with the following question:

|  
| With a bar-magnet you can lift 1 kilo of steel.  
| Then you split the magnet in two exact halves.  
| How much can you lift at best with each of the two smaller bars?

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- | A. about 1 kilo
  - | B. about 3/4 of a kilo
  - | C. a bit more than 1/2 a kilo
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| I searched the internet for a good explanation, but without success.  
| I found webpages that mentioned that you cannot simply add (or split)  
| these forces.  
| I also found lots of formulas but I don't know how to apply them on this  
| situation.

| Anyone can give me a hand?

| Bert

Sure.  
Start with a bar magnet that can lift 1/4 kilo.  
Then get another that can do the same.  
Tie them together.  
Attach a pan to a block of iron.  
Lift iron with magnets.  
Add weights to pan until block falls.  
Record load. Report details back to us.

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