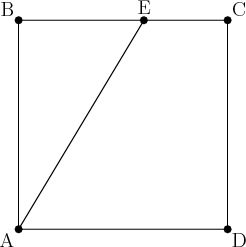
Square [ABCD](http://www.artofproblemsolving.com/Forum/code.php?hash=fb2f85c88567f3c8ce9b799c7c54642d0c7b41f6&sid=8afcebad16611621f5e6aa1a03802a1a) has side length [10](http://www.artofproblemsolving.com/Forum/code.php?hash=b1d5781111d84f7b3fe45a0852e59758cd7a87e5&sid=8afcebad16611621f5e6aa1a03802a1a). Point [E](http://www.artofproblemsolving.com/Forum/code.php?hash=e0184adedf913b076626646d3f52c3b49c39ad6d&sid=8afcebad16611621f5e6aa1a03802a1a) is on [\overline{BC}](http://www.artofproblemsolving.com/Forum/code.php?hash=a3cb093caa79b18fec430360fb27ef2fbc26ec4c&sid=8afcebad16611621f5e6aa1a03802a1a), and the area of [\triangle ABE](http://www.artofproblemsolving.com/Forum/code.php?hash=a1551773a2faf0d9d5e913596351082d24ffe602&sid=8afcebad16611621f5e6aa1a03802a1a) is [40](http://www.artofproblemsolving.com/Forum/code.php?hash=af3e133428b9e25c55bc59fe534248e6a0c0f17b&sid=8afcebad16611621f5e6aa1a03802a1a). What is [BE](http://www.artofproblemsolving.com/Forum/code.php?hash=3472ff5765a2d9cb8605e9b928f61808c7010096&sid=8afcebad16611621f5e6aa1a03802a1a)?

[](http://www.artofproblemsolving.com/Forum/code.php?hash=164abe1c52f59330290a58a980f587f8e28fbe53&type=2&sid=8afcebad16611621f5e6aa1a03802a1a)

Mr. Green measures his rectangular garden by walking two of the sides and finding that it is [15](http://www.artofproblemsolving.com/Forum/code.php?hash=f1abd670358e036c31296e66b3b66c382ac00812&sid=8b474dbaa50499be1dbfb03d6e5a6949) steps by [20](http://www.artofproblemsolving.com/Forum/code.php?hash=91032ad7bbcb6cf72875e8e8207dcfba80173f7c&sid=8b474dbaa50499be1dbfb03d6e5a6949) steps. Each of Mr. Green's steps is [2](http://www.artofproblemsolving.com/Forum/code.php?hash=da4b9237bacccdf19c0760cab7aec4a8359010b0&sid=8b474dbaa50499be1dbfb03d6e5a6949) feet long. Mr. Green expects a half a pound of potatoes per square foot from his garden.

How many pounds of potatoes does Mr. Green expect from his garden?

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**Ciphering #2**

**5 points 10 points**

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**Ciphering #1**

**5 points 10 points**

A softball team played ten games, scoring 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 runs. They lost by one run in exactly five games. In each of their other games, they scored twice as many runs as their opponent. How many total runs did their opponents score?

What is the value of

[\frac{2^{2014}+2^{2012}}{2^{2014}-2^{2012}} ?](http://www.artofproblemsolving.com/Forum/code.php?hash=f4015630b22fb56202e4b714d0509881d774440c&sid=8afcebad16611621f5e6aa1a03802a1a)

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**Ciphering #4**

**5 points 10 points**

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**Ciphering #3**

**5 points 10 points**

Ray's car averages 40 miles per gallon of gasoline, and Tom's car averages 10 miles per gallon of gasoline. Ray and Tom each drive the same number of miles. What is the cars' combined rate of miles per gallon of gasoline?

A flower bouquet contains pink roses, red roses, pink carnations, and red carnations. **One third** of the pink flowers are roses, **three fourths** of the red flowers are carnations, and **six tenths** of the flowers are pink.

What percent of the flowers are carnations?

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**Ciphering #6**

**5 points 10 points**

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**Ciphering #5**

**5 points 10 points**