

Minimum Wage Math

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1. If lawmakers had increased the minimum wage during the last 40 years to keep up with inflation, it would now be \$10.90 per hour. Instead, it is \$7.25 per hour.



Assuming a 40-hour work week, how much less money does a minimum wage worker make per week today than s/he would have had if the minimum wage had kept up with inflation?

2. Tipped workers get only \$2.13 per hour, and this rate has not increased since 1991. Advocates for a higher minimum wage (see <www.raise-theminimumwage.com>) are calling for lawmakers to increase the federal minimum wage to \$10.10 per hour and to make the tipped minimum wage be 70% of that.



If the tipped minimum wage were 70% of \$10.10, what would it be?

3. Tipped workers receive a lower minimum wage because their tips are supposed to raise their pay to at least minimum wage. If their tips do not increase their pay up to minimum wage, the employer is supposed to make up the difference.

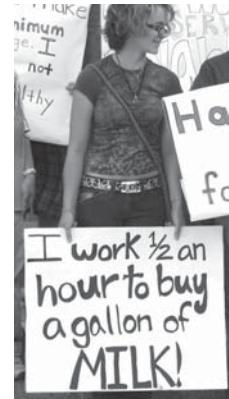


Sally works at a diner. At a recent 6-hour shift, the total bills for her tables came to \$300. She received 15% of this total in tips. She gave the busser and the cook each 20% of her total tips. How much did she have left? When she adds that amount to her base pay of \$2.13 per hour, is she making at least the federal minimum wage? How much over or under is she?

4. If Sally's employer does not ensure that she gets at least a minimum wage, this is called wage theft.

At the end of her shift (see #3), how much should Sally's employer pay her to ensure she is getting a minimum wage and to ensure that they (the employer) are not violating the law by committing wage theft?

5. Some states have higher minimum wages. In Massachusetts, the minimum wage has been \$8.00 since 2008. It is scheduled to go up to \$9.00 in 2015, to \$10 in 2016, and to \$11.00 in 2017. Low wage workers and unions fought for these increases, and were proud to win the highest minimum wage in the country.



However, they had hoped to tie future increases in the minimum wage to the Consumer Price Index (CPI). The CPI measures changes in the prices we pay for basic goods and services. (Find out more about the CPI at <www.bls.gov/cpi>.) Lawmakers did not agree, so the Massachusetts minimum wage is *not* tied to increases in the CPI.

Make a line graph showing the change in the Massachusetts minimum wage from 2008-17. Imagine that activists had convinced legislators to tie the minimum wage to the CPI and imagine that the CPI increases every year by 3%. Add ten more years to the chart and extend the line to show what would happen. Draw another line using another color to show what you think will happen given that the minimum wage is not tied to the CPI.

See <changeagent.nelrc.org/issues> for an answer sheet and for more ideas about how to use real world math in the classroom.