

Rayven’s First Car

In 2019 Rayven’s grandparents bought a new 2019 Chevy Equinox SUV for \$35,700 when the average price of a new car was \$38,259. In October, 2025 they decided to buy a new car since they had driven the Equinox 152,000 miles and they were ready for something new. They decided on a 2026 Ford Escape Platinum Hybrid which cost \$43,210. At the time, the average price of a new car was \$48,841.

Rather than trade-in their high-mileage used car, they decided to give the car to Rayven who would soon be 16. But her grandparents and parents agreed that she would be responsible for the car expenses and so would have to go to work part-time at the current minimum wage of \$13 an hour for a 16-year-old in her state.

This all sounds great—BUT, Rayven is an excellent volleyball player. She is the only sophomore on her varsity team which plays in the fall with practices, weekday games and Saturday tournaments. She also plays club volleyball from January through June which she has done for several years where she also has practices, evening games and Saturday tournaments.

1) Should Rayven accept the car and the car expenses? Yes No Explain Why

2) Do The Math:

What was the percentage increase in the average price of a new car from 2019 through 2025? _____%
Round your answer to the nearest 1/10th percent. **$\$48,841 - \$38,259 = \$10,582$**
 $\$10,582 / \$38,259 = .2765 = 27.7\%$

3) Do The Math:

If Rayven found time to work 8 hours a week at the minimum wage, what would be her biweekly net pay?

Biweekly Gross Pay	\$	$\\$13.00 \times \\$16.00 = \\$208.00$
Federal Income Tax (2.1%)	\$	$\\$208.00 \times .021 = \\4.37
State Income Tax (5.0%)	\$	$\\$208.00 \times .05 = \\10.40
Social Security (6.2%)	\$	$\\$208.00 \times .062 = \\12.90
Medicare (1.45%)	\$	$\\$208.00 \times .0145 = \\3.02
Total Withholding	\$	Sum of the 4 amounts = \$30.69
Biweekly Net Pay	\$	$\\$208.00 - \\$30.69 = \\$177.31$