# Variance Analysis

*Directions:*
Answer the following questions.

1. Purchase Price Variance: Xavier's Bikes bought wheels for $20 per wheel if they purchased 1,000 wheels. During the year, they only purchased 750 wheels. Because they did not buy 1,000 wheels they paid $25 per wheel. What was the variance?

2. Labor Rate Variance: Xavier's Bikes estimated an average labor rate of $25 per hour for the new year. During the first month of the year, they realized the actual labor rate is $35 per hour and their production staff worked 5,000 hours. What was the variance?

3. Variable Overhead Spending Variance: Xavier's Bikes estimated they would have a variable overhead rate of $5 per labor hour worked. In August, the actual variable overhead rate was $7 per hour and their employees worked 5,500 hours. What was the variance?

4. Selling Price Variance: Xavier's Bikes sells their bikes for $250. A new company opened and began selling bikes at a cheaper price forcing Xavier's to sell their bikes for $175. During one month, they sold 1,000 bikes. What was the selling price variance?

5. Material Yield Variance: Xavier's Bikes estimates they will produce 1,000 bike racks in one quarter. However, there was an increased demand and they needed to produce 1,500 bike racks. Xavier's needs to purchase more metal for the racks. The additional metal will cost $15 per rack. What is the material yield variance?

STUDENT ACTIVITY

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6. Labor Efficiency Variance: Xavier's Bikes estimated it would take 25 hours to produce a new bike part. One month into the project, they noticed they are under budget for the hours and realize it would take 50 hours to complete. The standard cost per hour is $25. What is the labor efficiency variance?

7. Variable Overhead Efficiency Variance: Xavier's Bikes budgeted 10,000 hours per month of variable overhead cost at a rate of $25 per hour. They installed a new machine which improves efficiency and cut back their hours to 7,500 hours per month. What is the variable overhead efficiency variance?