

Percent Increase/Decrease (Advanced)

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1. The cost of a loaf of bread in 2008 was \$3.25. In 2015 the cost rose to \$4.45. What was the percent increase in price?
2. In 2017, Melissa was able to run a mile in 7 minutes. Every year, her mile-run time decreases by 2.5%. What will her run time be in 2025?
3. The radius of a circle decreases by 15%. By what percent does its area decrease?
4. The radius of a circle increases by 30%. By what percent does its circumference increase?
5. A square's side length increases by 250%. By what percent does its area change? By what percent does its perimeter change?
6. Two bases of a trapezoid both increase by 30% and its height decreases by 12%. By what percent does its area change? Is it an increase or decrease?
7. Jacob's gpa increased by 10% every year during his four years of high school. What is the effective percent change from when he started high school until graduation? (**Hint:** It is *not* 40%.)