

Where applicable, always round to the nearest hundredth.

Finding a percentage:

- 1. What percent is 67 of 100?
- 3. What percent is 34 of 50?
- 5. What percent of 68 is 17?
- 7. What percent of 264 is 99?
- **9.** What percent of 8 is 15?

- 2. What percent of 100 is 34?
- 4. What percent of 25 is 12?
- 6. What percent is 55 of 125?
- 8. What percent is 126 of 84?
- **10.** What percent is 117 of 624?

11. In a class of 240 students, 117 are female. What percent of the class are female?

- **12.** On a job site of 32 workers, 17 are male. What percent of the workers are male?
- 13. An 80 Liter gas tank is filled with 38 Liters of gas, what percent of the tank is filled?
- 14. In a class of 40 students, 15 are male. What percent of the class are female?

Percentages of numbers:

- 1. What is 25% of 100?
- **3.** What is 152% of 100?
- 5. What is 13% of 235?
- **7.** Of 25, what is 90%?
- 9. Of 28, what is 136%?

- 2. What is 37% of 100?
- 4. What is 28% of 57?
- 6. What is 78% of 128?
- 8. What is 145% of 25?
- 10. What is 5% of 356?
- 11. A 350 mL beaker is filled with a 12.8% acid solution, how many mL are acid?
- 12. In a class of 320 students, 55% are female, how many of the students are female?
- **13.** A Steel plate is 45% iron. If the total weight of the plate is 500kg, what is the weight of iron?
- 14. In a class of 50 students, 12% are expected to fail. How many students will pass?
- **15.** A bicycle has a listed price of \$349.99. If tax is at 6.9%, what is the tax on the bike? Round to the nearest cent.



Numbers representing a percentage:

- 1. 25 is 25% of what number?
- 3. 30 represents 15% of what number?
- 5. 300 represents 40% of what number?
- 2. 18 represents 32% of what number?
- 4. 51 is 75% of what number?
- 6. 1250 is 12.5% of what number?
- **7.** A company with a branch in Canada has 24% of its employees in Canada. If there are 1500 employees in Canada, how many are there in total?
- **8.** In a Physics class at S.F.U there are 105 men in the class. If this represents 35% of the class, how many students, in total, are in this physics class?
- 9. A car's tank is 30% filled. If the car has 24 liters of fuel, what is the capacity of the tank?
- **10.** A penny is nickel plated with copper. If the copper coating on the penny takes up 45% of the weight of the penny and the copper weighs 0.36 grams, what is the weight of the entire penny?

Calculating a Percent more or less than a number:

- 1. What is 15% more than 30?
- 3. What is 125% more than 100?
- **5.** What is 55% less than 256?
- **7.** What is 5% more than 1024?
- 9. What is 35% less than 356?

- 2. What is 36% less than 100?
- **4.** What is 78% less than 54?
- 6. What is 99% less than 200?
- 8. What is 12% more than 5000?
- 10. What is 85% more than 85?
- **11.** A company that produces cars says that the next model will be 12.5% cheaper than the current model. If the current model costs \$34500, how much will next year's model cost? Round to the nearest cent.
- **12.** If John has 35% more money than Jake, and Jake has \$650 then how much money does John have?
- **13.** An acid solution is 35% acid, the rest is water. If the total amount of liquid is 450mL then how much of the solution is water?
- **14.** An engine manufacturing company claims that their newest engine will produce 25% more horsepower than their current model. If the current model can produce 510 horsepower, how much should the next engine produce?





Finding the percent more or less of two numbers:

- 1. 100 is what percent more than 50?
- **3.** 37 is what percent more than 25?
- **5.** 75 is what percent less than 150?
- 7. 702 is what percent less than 864?
- 9. 5 is what percent more than 4?

- 2. 78 is what percent less than 100?
- 4. 276 is what percent more than 150?
- 6. 507 is what percent more than 312?
- 8. 189 is what percent less than 224?
- 10. 49 is what percent less than 50?
- **11.** Kathrine's weekly salary is currently \$1200. In a month however she expects this to increase to \$1350, what percent more is this?
- **12.** The cost of gas has gone from \$1.50 down to \$0.99. What percent less is the current gas price?
- **13.** The price of the last year's model of a certain motorcycle was \$13280. If the current year's model costs \$12699 what percent less is the current model?
- **14.** Before leaving, Mike had filled up his cars tank to the maximum capacity of 80L. If at the end of a drive mike has 63L left, what percent of the gas did Mike use?

Finding a number that is some percent more or less:

- 1. 20% more than what number is 30?
- 3. 12.5% less than what number is 259?
- **5.** 37.5% less than what number is 21?
- **7.** 87.5% more than what number is 2052?
- **9.** 60% more than what number is 533?
- **2.** 45% less than what number is 100?
- 4. 20% more than what number is 183?
- 6. 32% less than what number is 229.5?
- 8. 72% less than what number is 560?
- **10.** 55% less than what number is 252?
- **11.** The price of a bicycle after a 25% discount is \$679.99. What was the original price? Round to the nearest cent.
- **12.** After a tune up a car produced 5% more horsepower. If the horsepower after the tune up is 525, what was the horsepower before the tune up?
- **13.** The new model of a car is 12% cheaper than the previous model. If the current model costs \$56300, what was the price of the previous model? Round to the nearest cent.
- **14.** After a 7% raise in weekly salary, Matt is now making \$1450 per week. What was Matt's weekly salary before the raise? Round to the nearest cent.





Answer Key:

Finding a percentage:

1. 67%	2. 34%	3. 68%	4. 48%
5. 25%	6. 44%	7. 37.5%	8. 150%
9. 187.5%	10. 18.75%	11. 48.75% female	12. 53.125% male
13. 47.5% filled	14. 62.5% female		

Percentages of numbers

1. 25	2. 37	3. 152	4. 15.96
5. 30.55	6. 99.84	7. 22.5	8. 36.25
9. 38.08	10. 17.8	11. 44.8 mL	12. 176 female
13. 225 kg	14. 44 students	15. \$24.15	

Numbers representing a percentage:

1. 100	2. 56.25	3. 200	4. 68
5. 750	6. 10000	7. 6250 employees	8. 300
9. 80 Liters	10. 0.8g		

Calculating a percent more or less than a number:

1. 34.5	2. 64	3. 225	4. 11.88
5. 115.2	6. 2	7. 1075.2	8. 5600
9. 231.4	10. 157.25	11. \$30187.50	12. \$877.50
13. 292.5 mL	14. 637.5 HP		

Finding the percent more or less of two numbers:

1. 100%	2. 22%	3. 48%	4. 84%
5. 50%	6. 62.5%	7. 18.75%	8. 15.625%
9. 25%	10. 2%	11. 12.5% more	12. 34% less
13. 4.375% less	14. 21.25% of the		
	gas		

Finding a number that is some percent more or less:

1. 25	2. 182	3. 296	4. 152.5
5. 33.6	6. 337.5	7. 1094.4	8. 2000
9. 333.125	10. 560	11. \$906.65	12. 500 HP
13. \$63977.27	14. \$1355.14		

