## Percentage Worksheet

Where applicable, always round to the nearest hundredth.

## Finding a percentage:

1. What percent is 67 of 100 ?
2. What percent of 100 is 34 ?
3. What percent is 34 of 50 ?
4. What percent of 25 is 12 ?
5. What percent of 68 is 17 ?
6. What percent is 55 of 125 ?
7. What percent of 264 is 99 ?
8. What percent is 126 of 84 ?
9. What percent of 8 is 15 ?
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 ?
2. What is $37 \%$ of 100 ?
3. What is $152 \%$ of 100 ?
4. What is $28 \%$ of 57 ?
5. What is $13 \%$ of 235 ?
6. What is $78 \%$ of 128 ?
7. Of 25 , what is $90 \%$ ?
8. What is $145 \%$ of 25 ?
9. Of 28 , what is $136 \%$ ?
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 500 kg , 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.

## Percentage Worksheet

## Numbers representing a percentage:

1. 25 is $25 \%$ of what number?
2. 30 represents $15 \%$ of what number?
3. 300 represents $40 \%$ of what number?
4. 18 represents $32 \%$ of what number?
5. 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 ?
2. What is $125 \%$ more than 100 ?
3. What is $55 \%$ less than 256 ?
4. What is $5 \%$ more than 1024 ?
5. What is $35 \%$ less than 356 ?
6. What is $36 \%$ less than 100 ?
7. What is $78 \%$ less than 54 ?
8. What is $99 \%$ less than 200 ?
9. 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 450 mL 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?

## Percentage Worksheet

## Finding the percent more or less of two numbers:

1. 100 is what percent more than 50 ?
2. 37 is what percent more than 25 ?
3. 75 is what percent less than 150 ?
4. 702 is what percent less than 864 ?
5. 5 is what percent more than 4 ?
6. 78 is what percent less than 100 ?
7. 276 is what percent more than 150 ?
8. 507 is what percent more than 312 ?
9. 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 80 L . 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 ?
2. $12.5 \%$ less than what number is 259 ?
3. $37.5 \%$ less than what number is 21 ?
4. $87.5 \%$ more than what number is 2052 ?
5. $60 \%$ more than what number is 533 ?
6. $45 \%$ less than what number is 100 ?
7. $20 \%$ more than what number is 183 ?
8. $32 \%$ less than what number is 229.5 ?
9. $72 \%$ 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.

## Percentage Worksheet

## 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 |
| $\mathbf{9 . ~} 38.08$ | $\mathbf{1 0 .} 17.8$ | $\mathbf{1 1 .} 44.8 \mathrm{~mL}$ | 12. 176 female |
| $\mathbf{1 3 . 2 2 5 \mathrm { kg }}$ | $\mathbf{1 4 . 4 4 \text { students }}$ | $\mathbf{1 5 . ~} \$ 24.15$ |  |

Numbers representing a percentage:

| 1. 100 | 2. 56.25 | 3. 200 | 4. 68 |
| :--- | :--- | :--- | :--- |
| 5. 750 | 6. 10000 | 7. 6250 <br> employees | 8. 300 |
| 9. 80 Liters | $\mathbf{1 0 . 0 . 8 g}$ |  |  |

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 | $\mathbf{1 0 . 1 5 7 . 2 5}$ | 11. $\$ 30187.50$ | 12. $\$ 877.50$ |
| $\mathbf{1 3 . 2 9 2 . 5 ~ \mathrm { mL }}$ | $\mathbf{1 4 . 6 3 7 . 5 \mathrm { HP }}$ |  |  |

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 <br> 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. $\$ 63977.27$ | $\mathbf{1 4 .} \$ 1355.14$ |  |  |

