## Review: Percent

| 1. Find a percentage of a number | 2. A fractional part as a percent |
| :---: | :---: |
| What is $60 \%$ of 300 miles? <br> Calculate $0.6 \times 300$ miles $=180$ miles. Or, using mental math, first calculate $10 \%$ of 300 miles, which is $1 / 10$ of it, or 30 miles. Then multiply $6 \times 30$ miles $=180$ miles. <br> Of the 15,400 workers in a city, 22\% work in a steel factory. How many workers is that? <br> Calculate: $0.22 \times 15,400=3,388$ workers. | What percentage is 600 g of 2 kg ? <br> Write the fraction $\frac{600 \mathrm{~g}}{2,000 \mathrm{~g}}=\frac{6}{20}=\frac{30}{100}=30 \%$. <br> One backpack costs $\$ 18$ and another $\$ 29$. What percentage is the price of the cheaper backpack of the price of the more expensive one? <br> Write the fraction $\frac{\$ 18}{\$ 29}=0.6206 \ldots \approx 62 \%$. |
| 1. Change the percentage into a decimal. <br> 2. Then multiply the number by that decimal. <br> Alternatively, use mental math shortcuts for finding $5 \%, 10 \%, 20 \%, 25 \%, 50 \%$, etc. of a number. | 1. First write the fraction. Note that the two quantities in the fraction must both be in the same units: both grams, both meters, both dollars, etc. <br> 2. Then convert the fraction into a decimal and finally a percent. |

1. Write as percentages, fractions, and decimals.

| a. $\qquad$ $\%=\frac{68}{100}=$ $\qquad$ | b. $7 \%=\square=$ | c. $\qquad$ $\%=\square=0.15$ |
| :---: | :---: | :---: |
| d. $120 \%=\square=$ | e. $\%=\frac{224}{100}=$ | f. $\qquad$ $\%=\square=0.06$ |

2. Fill in the table. Use mental math.

| percentage / number | $\mathbf{6 , 1 0 0}$ | $\mathbf{9 0}$ | $\mathbf{5 7}$ | $\mathbf{6}$ |
| :--- | :--- | :--- | :--- | :--- |
| $1 \%$ of the number |  |  |  |  |
| $4 \%$ of the number |  |  |  |  |
| $10 \%$ of the number |  |  |  |  |
| $30 \%$ of the number |  |  |  |  |

3. A group of skaters has 15 girls and 5 boys.

What percentage of the skaters are girls?

