# Grade 6 Mathematics <br> Week of December 18 - December 22 

## Lesson 4.3: Percentages

## Lesson Materials

- Lessons for Section 4.3 Percentages
- Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the "Table of Contents" at the top of the page to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.


Numbers are all around us. They serve very different purposes depending on how they are used. A number is a mathematical object used to count,
measure or label.
measure or label.


Work through the online lessons for this section. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

## Suggested Lesson Schedule

| Monday | Thursday |
| :---: | :---: |
| - Introduction | - Simplest Form |
| - Percentages | - Matching |
| - LG 4.3 p. 7-8, \#1-2 | - Conversions <br> - Examples |
| Tuesday | - Practice |
| - Percent to Decimal <br> - Practice | - LG p. 10, \#7 |
| - Decimal to Percent | Friday |
| - Practice | - Solving Percentage Problems |
| - LG p. 8, \#3-4 | - Percent Problems <br> - Percent Discounts |
| Wednesday | - LG p. 10, \#8-11 |
| - Percents and Fractions <br> - LG p. 9, \#5-6 |  |

### 4.3 Percentages

1. What percent of each square is shaded

a) $\qquad$

d) $\qquad$

b) $\qquad$
e) $\qquad$

c) $\qquad$

f) $\qquad$
2. Shade the percentage given on the grids
a) $20 \%$
b) $47 \%$
c) $99 \%$

d) $10 \%$
e) $25 \%$
f) $50 \%$

3. Rewrite each percentage as a decimal. Reminder: To convert percentages to decimals, move the decimal two places to the left. You may need to add zeros at the beginning of a number.
Ex. 61.3\%
c. 3\%
f. $100 \%$
0.613
a. $78 \%$
b. $99 \%$
d. $8 \%$
e. $143 \%$
g. $23.8 \%$ - challenge
h. $5.14 \%$ - challenge
4. Rewrite each decimal as a percentage. Reminder: To convert decimals to percentages, multiply the decimal by 100 (ie. move the decimal two places to the right.)

Ex. 0.562 56.2\%
a. 0.43 $\qquad$ b. 0.98 $\qquad$ c. 0.02 $\qquad$
d. 0.06 $\qquad$ e. 0.5 $\qquad$ f. 1.09 $\qquad$
g. 0.011 challenge $\qquad$ h. 1.342 challenge $\qquad$
5. Convert each percentage to a fraction then to a ratio. Reminder: First, convert each percentage to a fraction over 100, then, simplify the fraction.

|  | Percentage | Fraction <br> (Over 100) | Fraction <br> (Simplified) | Ratio <br> (Simplified) |
| :--- | :---: | :---: | :---: | :---: |
| Ex. | $16 \%$ | $\frac{\mathbf{1 6}}{\mathbf{1 0 0}}$ | $\frac{\mathbf{4}}{\mathbf{2 5}}$ | $4: 25$ |
| a. | $42 \%$ |  |  |  |
| b. | $53 \%$ |  |  |  |
| c. | $75 \%$ |  |  |  |
| d. | $8 \%$ |  |  |  |
| e. | $3 \%$ |  |  |  |
| f. | $80 \%$ |  |  |  |

6. Convert each fraction to a percentage. Reminder: First, convert the fraction to an equivalent fraction over 100, then change it into a percentage.

|  | Ratio | Fraction | Fraction <br> (Over 100) | Percentage |
| :--- | :---: | :---: | :---: | :---: |
| Ex. | $\mathbf{2 : 5}$ | $\frac{2}{5}$ | $\frac{\mathbf{4 0}}{\mathbf{1 0 0}}$ | $\mathbf{4 0 \%}$ |
| a. |  | $\frac{9}{10}$ |  |  |
| b. |  | $\frac{1}{4}$ |  |  |
| c. |  | $\frac{3}{20}$ |  |  |
| d. |  | $\frac{47}{50}$ |  |  |
| e. |  | $\frac{1}{5}$ |  |  |
| f. |  | $\frac{13}{25}$ |  |  |

## Math 6

7. Fill in the table. Reduce fractions to simplest terms. State ratio in simplest form

|  | Percent | Decimal | Fraction | Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Ex. | $75 \%$ | 0.75 | $\frac{75}{100}=\frac{3}{4}$ | $-3: 4$ |
| a. |  | 0.09 |  |  |
| b. | $65 \%$ |  | $\frac{1}{2}$ |  |
| c. |  |  | $\frac{7}{20}$ |  |
| d. |  |  |  |  |
| e. | $5 \%$ |  |  |  |
| f. |  |  |  |  |

8. The Rockets won 9 games throughout their entire season. Of all their games, this team won $50 \%$ of them. Given this, how many games in total did this baseball team play?
9. In Westsyde $80 \%$ of families own a beagle. If there are a total of 25 families in this neighbourhood that own a dog, then how many dog owners own a beagle?
10. For one English test, Mike had to answer 20 questions. Of these 20 questions, Mike answered 11 of them correctly. What percent did Mike get on his English test?
11. There are 20 students in a class and $75 \%$ of these students passed their History test. How many of these students passed their test?
