

## Math 6: Week of April 13th

**Review Lesson:** Percents

Target: Convert between fractions, decimals and percents.

### Directions:

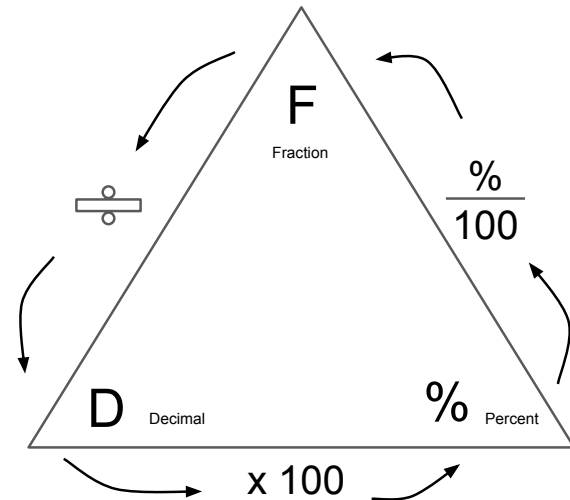
- Go through the slides (notes) and refresh your memory! If you have your math notebook, notes should already be there. This is where we left off back in March.
- Complete the practice problems on a separate piece of paper.
- How did you do? Check your answers with the key given at the end of the lesson.
- Are you stuck? Check Google Classroom for the schedule of online help sessions via Zoom. Or, email Mrs Thomas to set up a help session.

## Percent $\longrightarrow$ Fraction

1. Write the value of the percent in the numerator of the fraction and 100 in the denominator.
2. Write the fraction in simplest form

## Percent $\longrightarrow$ Decimal

1. Write the percent as a fraction
2. Convert the fraction to a decimal by dividing the numerator by the denominator.



## Review Practice Problems

See Worksheets (Lesson 12 & 13)

Check your work!


Worksheet  
Answers  
Provided

If you're stuck,  
ASK  
Mrs. Thomas!

Worksheet 13

1.  $\frac{1}{2}$ ; 0.75; 75%  
 2.  $\frac{1}{4}$ ; 0.25; 25%  
 3.  $\frac{1}{2}$ ; 0.6; 60%  
 4. 1; 1; 100%  
 5.  $\frac{1}{2}$ ; 0.5; 50%  
 6.  $\frac{2}{3}$ ; 0.6; 66.6%  
 7. 7%  
 8. 20%  
 9. 40.5%  
 10. 150%  
 11. 50%  
 12. 60%  
 13.  $33\frac{1}{3}\%$   
 14. 175%  
 15.  $\frac{1}{2}$ ; 25%; 0.3  
 16. 60%; 0.65;  $\frac{2}{3}$   
 17.  $1\frac{1}{2}$ ; 128%; 1.3  
 18. a. 80%  
 b. 20%

Worksheet 12

1.  $\frac{30}{100}$ ; 30%  
 2.  $\frac{24}{100}$ ; 24%  
 3.  $\frac{25}{100}$ ; 25%  
 4.  (shade 1 of the 4 squares)  
 5.  $\frac{1}{2}$   
 6.  $\frac{5}{4}$   
 7.  $\frac{23}{100}$   
 8.  $1\frac{1}{2}$   
 9.  $\frac{20}{9}$   
 10. 3  
 11. 0.2  
 12. 0.65  
 13. 0.33  
 14. 0.001  
 15. 2.5  
 16. 0.5  
 17. 10%  
 18. 65%

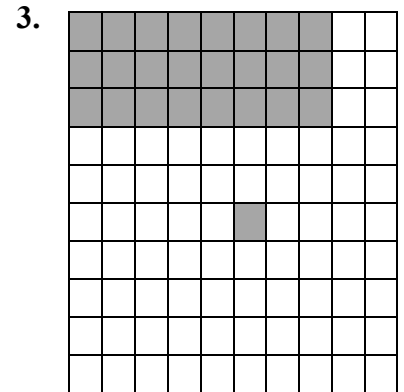
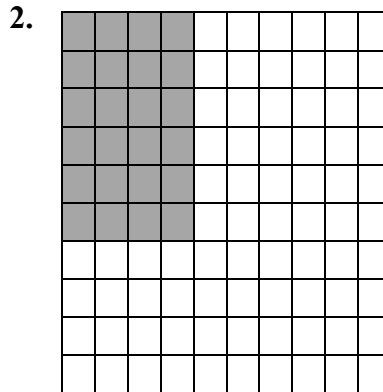
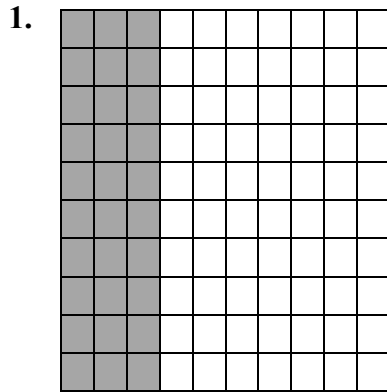
## Answers to last week's Problem of the Day

- 91 pennies
- 89 ways
- 1)8 2)12 3)6 4)1  
 $4 \times 4 \times 4$ : 8, 24, 24, 8  $5 \times 5 \times 5$ : 8, 36, 54, 27
- 6, 6, 0
- 15, 55,  $\frac{1}{2}(n^2 + n)$
- 5, 13, 26, 45 (+8, +13, +19)
- 1st digit is 1 less than subtracting the first digits. 1st & last digit add to 9; middle digit =9
- 6, 24, 120. use a factorial: "!" (! means if there are 6 blocks, it is  $6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1$ )
- They both needed 6 helpers
- A square of  $10 \times 10$  has the largest area.

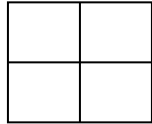
## Lesson 12 ~ Introducing Percents

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

For each shaded grid, write the ratio of the shaded squares to 100 (a fraction) and the percent of squares shaded as a number with the % sign.



4. Shade 25% of the figure:



Write each percent as a fraction in simplest form.

5. 50%

6. 80%

7. 23%

8. 150%

9. 45%

10. 300%

Write each percent as a decimal.

11. 20%

12. 65%

13. 33%

14. 0.1%

15. 250%

16. 50%

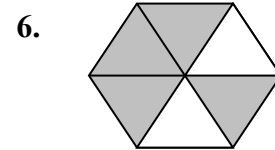
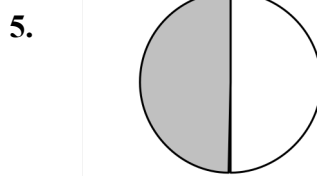
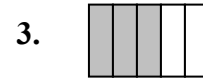
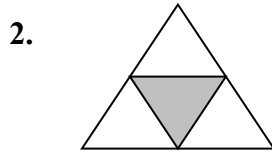
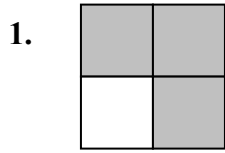
17. If 90% of a drink is real fruit juice, what percent is not real fruit juice?

18. Max found a jacket on sale for 35% off its original price. What percent of the original price will Max pay for the jacket?

# Lesson 13 ~ Percents, Decimals and Fractions

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Write the shaded part of each shape as a fraction in simplest form, a decimal and a percent.



Write each decimal as a percent.

7. 0.07

8. 0.2

9. 0.405

10. 1.5

Write each fraction as a percent.

11.  $\frac{1}{2}$

12.  $\frac{6}{10}$

13.  $\frac{1}{3}$

14.  $1\frac{3}{4}$

Order the numbers from least to greatest.

15. 25%, 0.3,  $\frac{1}{5}$

16.  $\frac{2}{3}$ , 60%, 0.65

17. 1.3, 128%,  $1\frac{1}{4}$

18. At school,  $\frac{4}{5}$  of the 6<sup>th</sup> graders interviewed preferred movies to plays.

a. What percent of the 6<sup>th</sup> graders preferred movies to plays?

b. What percent of the 6<sup>th</sup> graders did not prefer movies to plays?

## Math 6: Week of April 13th

**New Lesson:** Percent of a Number

**Target:** Find the percent of a number

### Directions:

- Go through the slides (notes) and work through the examples on a separate piece of paper. If you have your math notebook, feel free to use it!
- Complete the practice problems on a separate piece of paper.
- How did you do? Check your answers with the key given at the end of the lesson.
- Are you stuck? Check Google Classroom for the schedule of online help sessions via Zoom. Or, email Mrs Thomas to set up a help session.

## Example 1

Solve the percent problem: 25% of 40 is \_\_\_\_.

- Rewrite using math symbols.  $25\% \times 40 = \underline{\hspace{2cm}}$
- Change percent to a decimal.  $0.25 \times 40 = 10$

**25% of 40 is 10.**

Each percent  $\rightarrow$  change to a decimal  
of  $\rightarrow$  x (multiply)  
is  $\rightarrow$  = (equal)

## Example 2

Solve the percent problem: \_\_\_\_ is 60% of 30.

- Rewrite using math symbols.  $\underline{\hspace{2cm}} = 60\% \times 30$
- Change percent to a decimal.  $\underline{\hspace{2cm}} = 0.6 \times 30$

**18 is 60% of 30**

## Example 3

Find the value of each expression.

a. 40% of \$1.00      b. 75% of \$200

- Convert the percent to a decimal and multiply.
  - $0.4 \times 1 = \$0.40$
  - $0.75 \times 200 = \$150$

**40% of \$1.00 is \$0.40**

**75% of \$200 is \$150**

## Example 4

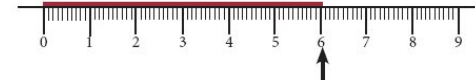
The price of gasoline this week is 105% of the price last week. Find the price of gasoline this week if gasoline was \$4.00 per gallon last week.

- Write the problem. 105% of \$4.00
- Write the percent as a decimal.  $1.05 \times 4.00$
- Solve.  $1.05 \times 4.00 = 4.20$

**The price of gasoline is \$4.20 per gallon this week.**

## Example 5

Draw a line segment that is 75% as long as this line segment:



- The segment is 6 centimeters long. 75% of 6 inches
- Write the problem.  $0.75 \times 6 = \underline{\hspace{2cm}}$
- Rewrite using math symbols.  $0.75 \times 6 = 4.5$
- Solve.
- Draw a segment 4.5 cm long.



## Practice Problems

See Worksheet ~ Lesson 14: Percent of a Number

Check your work!

Worksheet  
Answers  
Provided

If you're stuck,  
ASK  
Mrs. Thomas!

1. \$0.25
2. \$0.80
3. 3
4. 20
5. 6
6. 2.5
7. 48
8. 33
9. 45
10. 11
11. 31
12. draw a line 4.3 cm long
13. draw a line 0.9 cm long
14. draw a line 9.4 cm long
15. 30%
16. 80%

Worksheet 14

## Lesson 14 ~ Percent of a Number

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

1. Find 25% of \$1.00.

2. Find 80% of \$1.00.

**Solve each percent problem.**

3. 10% of 30 is \_\_\_\_\_

4. 25% of 80 is \_\_\_\_\_

5. 15% of 40 is \_\_\_\_\_

6. \_\_\_\_\_ is 5% of 50

7. \_\_\_\_\_ is 150% of 32

8.  $33\frac{1}{3}\%$  of 99 is \_\_\_\_\_

9. 75% of 60 is \_\_\_\_\_

10. \_\_\_\_\_ is 22% of 50

11. 100% of 31 is \_\_\_\_\_

**Draw a line segment that fits each description. Record the length of each new line segment to the nearest tenth of a centimeter.**

12. Draw 50% of the line.



13. Draw 25% of the line.



14. Draw 200% of the line.



15. What percent of 1 meter is 30 centimeters?

16. What percent of 1 centimeter is 8 millimeters?