

PREVIEW FILE

WINTER FUN

Converting Rational Numbers
Fraction, Decimal & Percent
Color-By-Number



ACTIVATED
EDUCATION

Directions

These color-by-number pages provide an engaging way to review fraction, decimal, and percent operations. Each coloring page has a different worksheet so you can easily differentiate and target the skills your students need to work on.

For students needing more support, you can provide a reference sheet for fraction, decimal, and percent conversions and operations to utilize as they work.

Another hint for struggling mathematicians would be to have them fill out the worksheet and check their answers with you or a peer *before* beginning to color.

6 Coloring Pages Included:

[BONUS PAGE....Hot Cocoa:](#)

Identify FDP steps and examples

[Sledding Fun:](#)

Finding Equivalent Fractions, Decimals or Percents

[Skiing Fun:](#)

Comparing Fraction, Decimal, and Percent Values

[Snowman Fun:](#)

Fraction, Decimal, and Percent Word Problems

[Snowboarding Fun:](#)

Percent of a Number Problems

[Snowflake Fun:](#)

Fraction, Decimal, and Percent Word Problems

PREVIEW FILE

Hot
cocoa



Hot Cocoa

Name: _____

Date: _____

Practice and Color

Directions: Each problem is the directions for or an example of converting between a decimal, fraction, or percent. Determine the correct conversion and use the key at the bottom to color the hot cocoa picture.

1. Rewrite the % over 100 Simplify	2. 1. Move decimal two places to the right. 2. Add the % sign.	3. 1. Divide the numerator by the denominator.
4. Convert the fraction to a decimal. 1. Move the decimal two places to the right. 2. Add the % sign.	5. 1. Remove the % sign. 2. Move decimal two places to the left.	6. 1. Write the decimal over 100 if it has an integer in the hundredths place or over 10 if only in the tenths place. 2. Simplify
7. 25%	8. $1/8 \rightarrow 1 \div 8 = 0.125$	9. $0.25 \rightarrow 25/100 \rightarrow 3/4$
10. $38/100 \rightarrow$	11. $1/5 \rightarrow 0.2 \rightarrow 20\%$	12. $75\% \rightarrow 0.75$

Key:
Fraction → Decimal (3 & 8) = red
Decimal → Percent (2 & 7) = green
Percent → Fraction (1 & 10) = light blue

Fraction → Percent
Decimal → Fraction



Directions: Each problem is the directions for or an example of converting between a decimal, fraction, or percent. Determine the correct conversion and use the key at the bottom to color the hot cocoa picture.

1. Percent to Fraction 1. Remove the % and rewrite the digits over 100 2. Simplify	2. Decimal to Percent 1. Move decimal two places to the right. 2. Add the % sign.	3. Fraction to Percent 1. Divide the numerator by the denominator.
4. Fraction to Percent 1. Convert the fraction to a decimal. 2. Move the decimal two places to the right. 3. Add the % sign.	5. Percent to Decimal 1. Remove the % sign. 2. Move decimal two places to the left.	6. Decimal to Fraction 1. Write the decimal over 100 if it has an integer in the hundredths place or over 10 if only in the tenths place. 2. Simplify
7. Decimal to Percent $0.25 \rightarrow 25\%$	8. Fraction to Decimal $1/8 \rightarrow 1 \div 8 = 0.125$	9. Percent to Fraction $25\% \rightarrow 25/100 \rightarrow 1/4$
10. Percent to Fraction $38\% \rightarrow 38/100 \rightarrow 19/50$	11. Fraction to Percent $1/5 \rightarrow 0.2 \rightarrow 20\%$	12. Percent to Decimal $75\% \rightarrow 0.75$

Key:
Fraction → Decimal (3 & 8) = red
Decimal → Percent (2 & 7) = green
Percent → Fraction (1 & 10) = light blue



PREVIEW FILE

ANSWER KEY



Sledding Fun

Fraction, Decimal & Percent Practice and Color #1

Name: _____

Date: _____

Directions: Solve for the equivalent number and circle the answer. Then, color the problem number according to the color by the correct answer.

1. 29%	2. 0.3	3. $\frac{2}{5}$
a) $\frac{29}{100}$ = pink	a) $\frac{3}{100}$ = black	a) 0.4 = orange
b) 0.029 = dark blue	b) 3% = green	b) 45% = yellow
c) $\frac{29}{100}$ = light blue	c) $\frac{3}{10}$ = gray	c) 0.25 = brown
4. 51%	5. 43%	6. $\frac{3}{4}$
a) $\frac{51}{100}$ = dark blue	a) $\frac{43}{100}$ = yellow	a) 7.5 = orange
b) 0.51 = red	b) 4.3 = light green	b) 75% = pink
c) 5.1 = pink	c) 0.43 = green	c) 34% = dark purple
7. 1.5	8. 27%	9. $\frac{17}{10}$
a) 65% = pink	a) 0.027 = yellow	a) 0.017 = gray
b) $\frac{3}{2}$ = dark purple	b) $\frac{27}{100}$ = light purple	b) 170% = brown
c) 120% = dark blue	c) 2.7 = pink	c) 17% = red
10. 0.1	11. 88%	12. $\frac{1}{2}$
a) $\frac{1}{100}$ = brown	a) $\frac{21}{25}$ = pink	a) 0.05 = dark purple
b) 100% = red	b) 8.8 = light purple	
c) 10% = yellow	c) 0.88 = dark blue	

ANSWER KEY

Sledding Fun

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ANSWER KEY



Sledding Fun

Fraction, Decimal & Percent Practice and Color #1

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Date: _____

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1. 29%	2. 0.3	3. $\frac{2}{5}$
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ANSWER KEY

Sledding Fun

Fraction, Decimal & Percent Practice and Color #1

Directions: Solve for the equivalent number and circle the answer. Then, color the problem number according to the color by the correct answer.

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a) $\frac{29}{100}$ = pink	a) $\frac{3}{100}$ = black	a) 0.4 = orange
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b) 0.51 = red	b) 4.3 = light green	b) 75% = pink
c) 5.1 = pink	c) 0.43 = green	c) 34% = dark purple
7. 1.5	8. 27%	9. $\frac{17}{10}$
a) 65% = pink	a) 0.027 = yellow	a) 0.017 = gray
b) $\frac{3}{2}$ = dark purple	b) $\frac{27}{100}$ = light purple	b) 170% = brown
c) 120% = dark blue	c) 2.7 = pink	c) 17% = red
10. 0.1	11. 88%	12. $\frac{1}{2}$
a) $\frac{1}{100}$ = brown	a) $\frac{21}{25}$ = pink	a) 0.05 = dark purple
b) 100% = red	b) 8.8 = light purple	
c) 10% = yellow	c) 0.88 = dark blue	



PREVIEW FILE

ANSWER KEY



Skiing Fun

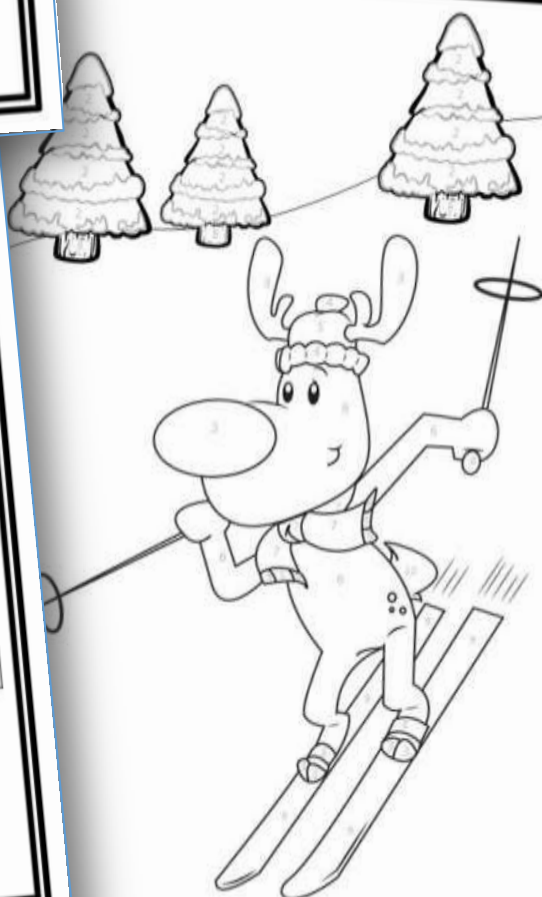
Fraction, Decimal & Percent Practice and Color #1

Name: _____

Date: _____

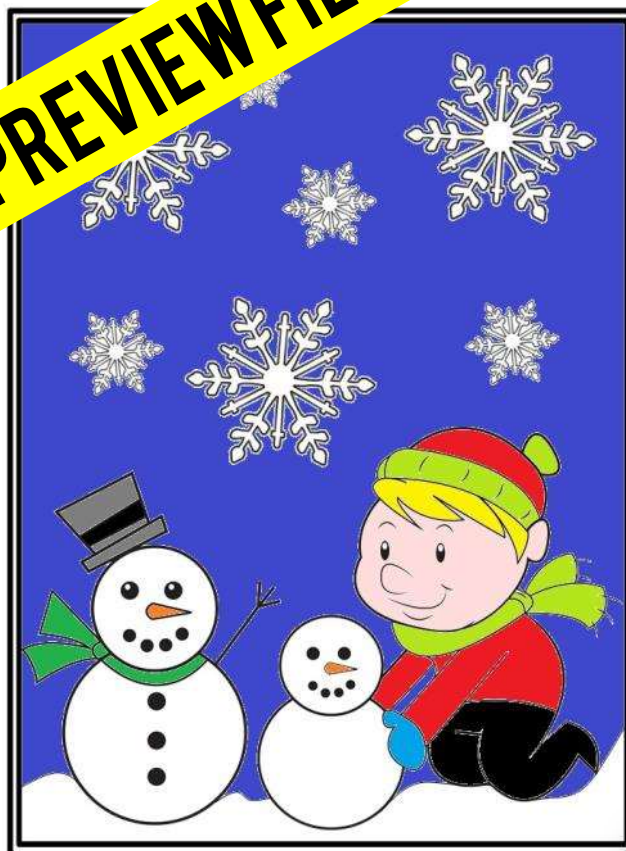
Directions: Identify the largest value and circle the answer. Then, color the problem number according to the color by the correct answer.

1. pink	2. a) $\frac{20}{100}$ = dark green	3. a) 0.25 = orange
= dark blue	b) 3% = light green	b) 2.5% = yellow
light blue	c) $\frac{3}{100}$ = gray	c) $\frac{2}{5}$ = dark brown
dark blue	5. a) $\frac{43}{10}$ = dark blue	6. a) $\frac{5}{7}$ = dark brown
ed	b) 0.43 = light green	b) 0.70 = tan
ink	c) 43% = green	c) 75% = light brown
ik	8. a) 0.027 = yellow	9. a) 0.017 = gray
k blue	b) $\frac{27}{100}$ = light purple	b) 170% = orange
	c) 2.7 = light green	c) 17% = red



1. a) 0.5 = pink	2. a) $\frac{20}{100}$ = dark green	3. a) 0.25 = orange
b) 50% = dark blue	b) 3% = light green	b) 2.5% = yellow
c) $\frac{31}{100}$ = light blue	c) $\frac{3}{100}$ = gray	c) $\frac{2}{5}$ = dark brown
4. a) $\frac{50}{100}$ = dark blue	5. a) $\frac{43}{10}$ = dark blue	6. a) $\frac{5}{7}$ = dark brown
b) 0.51 = red	b) 0.43 = light green	b) 0.70 = tan
c) 0.051 = pink	c) 43% = green	c) 75% = light brown
7. a) 65% = pink	8. a) 0.027 = yellow	9. a) 0.017 = gray
b) $\frac{3}{2}$ = yellow	b) $\frac{27}{100}$ = light purple	b) 170% = orange
c) 120% = dark blue	c) 2.7 = light green	c) 17% = red
10. a) $\frac{10}{100}$ = dark brown		
b) 100% = tan		
c) 10% = yellow		

PREVIEW FILE



Snowman Fun

Name: _____

Date: _____

Directions: Solve the problem and circle the answer. Then, color the problem number according to the color by the correct answer.

1. Joe bought a video game and paid $\frac{1}{9}$ of the total price in tax. What percent tax did he pay? a) 90% = red b) 11% = dark blue c) 8% = pink	2. Liz did $\frac{4}{5}$ of her homework on Saturday. What percent does she have to finish on Sunday? a) 20% = gray b) 10% = light green c) 80% = green	3. A cup of water is $\frac{1}{4}$ full. What percent full is the cup? a) 33.3% = light green b) 75% = orange c) 25% = dark purple
4. Sofia sent a text to her best friends and $\frac{2}{3}$ replied. What percent of her friends sent a text back to her? a) 10% = pink b) 6% = dark purple c) 66% = dark green	5. The newspaper is delivered to 200 out of 45,125 residents. What percent of people get the newspaper? a) 4% = yellow b) 0.44% = light green c) 3% = light blue	6. The Jones family watched 22 minutes of a 130 minute long movie when the doorbell rang. What percent of the movie do they have left to watch? a) 57% = gray b) 83% = brown c) 17% = yellow
7. Football teams have 53 players on the roster, but only 11 players on the field. What percent of team players are on the field? a) 8% = brown b) 53% = dark blue c) 21% = red	8. Flies have a lifespan of up to 25 days. What percent of their life is one day? a) 0.25% = orange b) 4% = black c) 25% = light blue	9. Eli used the candy machine and got 17 candies. If 3 are green, what percent is not green? a) 18% = dark purple b) 82% = light blue c) 14% = gray

Snowman Fun



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PREVIEW FILE

ANSWER KEY



Snowboarding Fun

Practice and Color #1

Name: _____
Date: _____

Directions: Solve for the percent of each given number and circle the answer. Then, color the problem number according to the color by the

200	2. 59.5% of 145	3. 3% of 2
blue	a) 85.5 = black	a) 0.06 = orange
blue	b) 72.5 = green	b) 6 = yellow
k	c) 86.27 = gray	c) 0.6 = brown
4	5. 10% of 48.46	6. 12% of 11.46
blue	a) 4.85 = yellow	a) 0.013 = orange
	b) 46 = light green	b) 1.14 = pink
	c) 58.46 = green	c) 1.37 = light green
	8. 37% of 9.88	9. 300% of $\frac{1}{2}$
ue	a) 3.5 = orange	a) 350 = gray
purple	b) 3.65 = dark green	b) 4.5 = pink
	c) 27.4 = light green	c) 150 = red
	11. 62% of $\frac{3}{4}$	12. 12.50% of $\frac{4}{5}$
	a) 0.465	

Snowboarding Fun

ANSWER KEY

Practice and Color #1

Directions: Solve for the equivalent number and circle the answer. Then, color the problem number according to the color by the correct answer.

1. 85% of 1200	2. 59.5% of 145	3. 3% of 2
a) 1020 = light blue	a) 85.5 = black	a) 0.06 = orange
b) 180 = dark blue	b) 72.5 = green	b) 6 = yellow
c) 1115 = pink	c) 86.27 = gray	c) 0.6 = brown
4. 200% of 54	5. 10% of 48.46	6. 12% of 11.46
a) 254 = dark blue	a) 4.85 = yellow	a) 0.013 = orange
b) 108 = red	b) 46 = light green	b) 1.14 = pink
c) 10.8 = pink	c) 58.46 = green	c) 1.37 = light green
7. 5% of 14.03	8. 37% of 9.88	9. 300% of $\frac{1}{2}$
a) 1.4 = pink	a) 3.5 = orange	a) 350 = gray
b) 0.7 = dark blue	b) 3.65 = dark green	b) 4.5 = pink
c) 7.01 = dark purple	c) 27.4 = light green	c) 150 = red
10. 10% of $\frac{4}{10}$	11. 62% of $\frac{3}{4}$	12. 12.50% of $\frac{4}{5}$
a) $\frac{1}{10}$ = yellow	a) 0.465 = dark purple	a) 0.1 = brown
b) 4 = light blue	b) 30 = dark blue	b) 0.4 = light purple
c) 0.04 = light purple	c) 0.5 = light purple	c) $\frac{2}{5}$ = pink



PREVIEW FILE

ANSWER KEY

Snowflake Fun

Name: _____

Date: _____

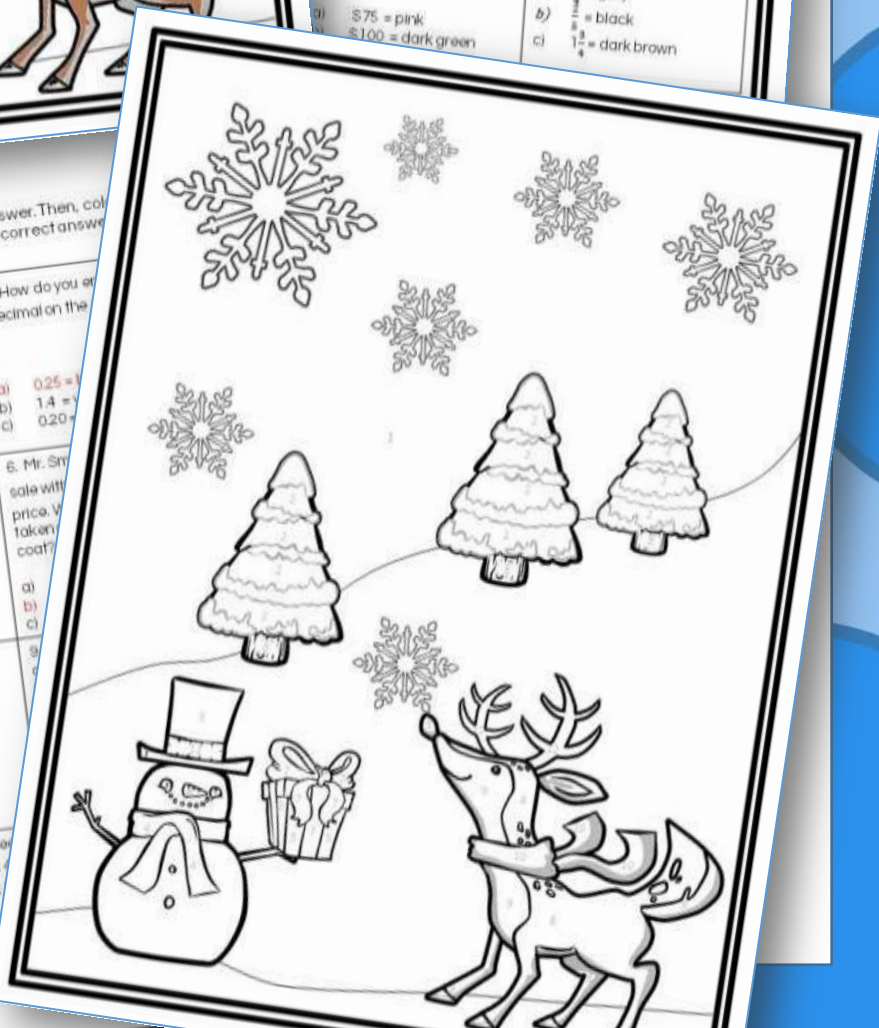
Directions: Solve the problem and circle the answer. Then, color the problem number according to the color by the correct answer.

1. During a sale, a store offers 50% off the original prices. What fraction is taken off the prices?	2. In a survey one in five people said they preferred a particular brand of cola. What is this figure as a percentage?	3. How do you enter $\frac{1}{4}$ as a decimal on the calculator?
a) $\frac{50}{100}$ = pink b) $\frac{1}{2}$ = light blue c) $\frac{1}{2}$ = dark blue	a) 5% = black b) 50% = dark green c) 20% = light green	a) 0.25 = black b) 1.4 = yellow c) 0.20 = brown
4. Joe pays tax at the rate of 25% of his income. What fraction of Joe's income is this?	5. When Hailey bought a car she had to put down a deposit of $\frac{1}{20}$ of the value of the car. What percentage is this?	6. Mr. Smith bought a coat on sale with $\frac{1}{3}$ off the original price. What percentage was taken off the price of the coat?
a) $\frac{1}{4}$ = dark blue b) $\frac{1}{5}$ = yellow c) $\frac{1}{25}$ = pink	a) 2% = yellow b) 20% = light green c) 5% = red	a) 33.3% = orange b) 75% = orange c) 30% = dark purple
7. Lindsey bought some fabric that was 1.75 yards long. How could this be written as a fraction?	8. Ellie is going through her closet to find clothes to donate to charity. Ellie has sorted 75% of her clothes. What fraction is that?	9. Riley's class has 12 girls and 16 boys. What percentage of the class is boys?
a) $1\frac{3}{4}$ yards = pink b) $1\frac{3}{4}$ yards = light blue c) $\frac{3}{4}$ yard = tan	a) $\frac{3}{4}$ = yellow b) $\frac{3}{4}$ = brown c) $\frac{3}{4}$ = light green	a) 57% = tan b) 75% = gray c) 13% = red
10. Luke and Emma buy a candy bar to share. Luke eats $\frac{1}{4}$ and Emma eats $\frac{1}{4}$. What percentage is left?	11. Mark earns \$250 a week. He spends $\frac{1}{5}$ on food and 40% on rent. How much does he have left?	12. A gumball costs \$0.25. What fraction of \$1.00 is this?
a) 50% = brown b) 40% = red c) 25% = pink	a) \$75 = pink b) \$100 = dark green c) \$75 = light purple	a) $\frac{1}{4}$ = gray b) $\frac{1}{4}$ = black c) $\frac{1}{4}$ = dark brown

Snowflake Fun

Directions: Solve the problem and circle the answer. Then, color the problem number according to the color by the correct answer.

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a) $\frac{50}{100}$ = pink b) $\frac{1}{2}$ = light blue c) $\frac{1}{2}$ = dark blue	a) 5% = black b) 50% = dark green c) 20% = light green	a) 0.25 = black b) 1.4 = yellow c) 0.20 = brown
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Thank you for previewing these Winter Fun Color-By-Number Pages!

I appreciate feedback and suggestions at my store or via email at
activatededucation@gmail.com

Thanks!

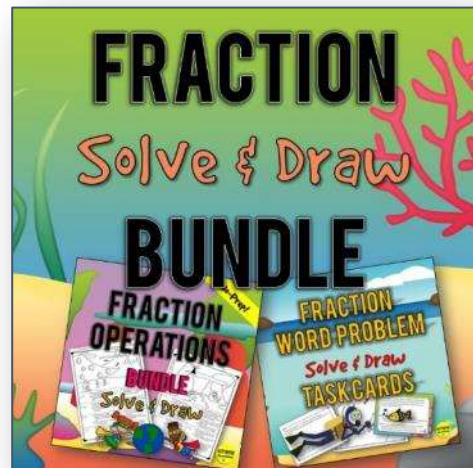
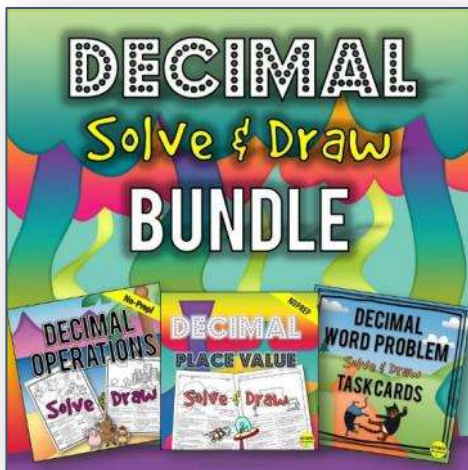


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