

Warm Up Grade 8

Date: _____



Copy and complete the chart

	Out of 100	Percent	Fraction	Decimal
a	11	11 %	$\frac{11}{100}$	0.11
b	29	29 %	$\frac{29}{100}$	0.29
c	75	75 %	$\frac{15}{20} \times \frac{5}{5} = \frac{75}{100}$	0.75
d	6	6 %	$\frac{6}{100} = \frac{3}{50}$	0.06
e	200	200 %	$\frac{200}{100} \div \frac{100}{100} = \frac{2}{1}$	2.00
f	117	117 %	$\frac{117}{100}$	1.17

	Out of 100	Percent	Fraction	Decimal
a	25	25%	$25/100 = 1/4$	0.25
b	92	92%	$92/100 = \frac{46}{50} = \frac{23}{25}$	0.92
c	64	64%	$64/100 = 16/25$	0.64
d	9	9%	$9/100$	0.09
e	84	84%	$42/50 = \frac{84}{100}$	0.84
f	18	18%	$18/100 = 9/50$	0.18
g	12.5	12.5%	$1/8 = \frac{1 \div 8}{8 \div 8} \rightarrow$	0.125
h	3	3%	$3/100$	0.03
i	40	40%	$2/5 = \frac{4}{10}$	0.40
j	15	15%	$15/100$	0.15
k	73	73%	$73/100$	0.73
l	140	140%	$140/100$	1.4
m	2.5	2.5%	$2.5/100 = \frac{25}{1000} = \frac{1}{40}$	0.025
n	123	123%	$123/100$	1.23

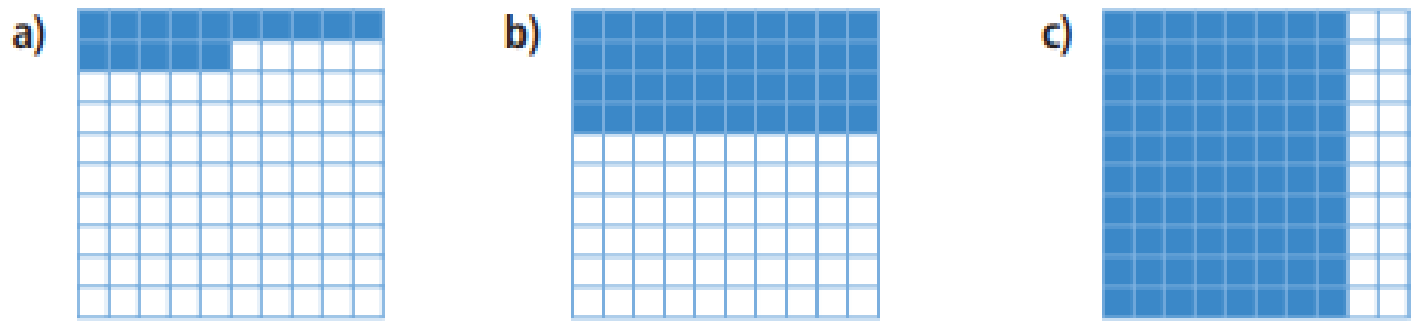
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$$\frac{25}{1000} = \frac{2.5}{100} \quad \text{or} \quad 2.5 \div 100$$

$$\frac{3.5}{7} = \frac{1}{2}$$

WS Solutions

1. What percent of each hundred chart is shaded?
Write each percent as a fraction and as a decimal.



1a) $\frac{16}{100} = 16\% = 0.16$

b) $\frac{40}{100} = 40\% = 0.40$

c) $\frac{80}{100} = 80\% = 0.80$

2. Write each percent as a fraction and a decimal.
Sketch number lines to show how the numbers are related.

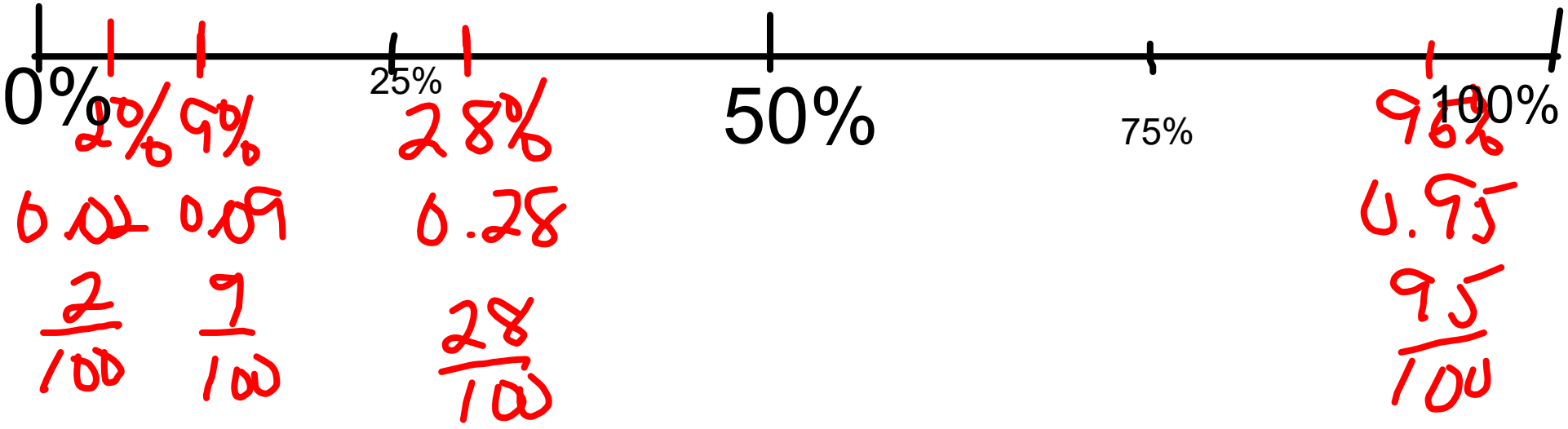
- a) 2%
- b) 9%
- c) 28%
- d) 95%

2 a) 2% 0.02 $\frac{2}{100}$

b) 9% 0.09 $\frac{9}{100}$

c) 28% 0.28 $\frac{28}{100}$

d) 95% 0.95 $\frac{95}{100}$



WS Solutions

3. Write each fraction as a decimal and a percent.

a) $\frac{2}{10} = \frac{20}{100}$

b) $\frac{3}{50} = \frac{6}{100}$

c) $\frac{4}{25} = \frac{16}{100}$

d) $\frac{13}{20} = \frac{65}{100}$

e) $\frac{4}{5} = \frac{80}{100}$

3 a) $\frac{2}{10} = 0.2$ or 20%

b) $\frac{3}{50} = \frac{6}{100}$ 0.06 or 6%

c) $\frac{4}{25} = \frac{16}{100}$ 0.16 or 16%

d) $\frac{13}{20} = \frac{65}{100}$ 0.65 or 65%

e) $\frac{4}{5} = \frac{80}{100}$ 0.80 or 80%

4. Fred had 8 out of 10 on a test. Janet had 82% on the test.
Who did better? How do you know?



4. Fred $\frac{8}{10} = \frac{80}{100} = 80\%$

0.8

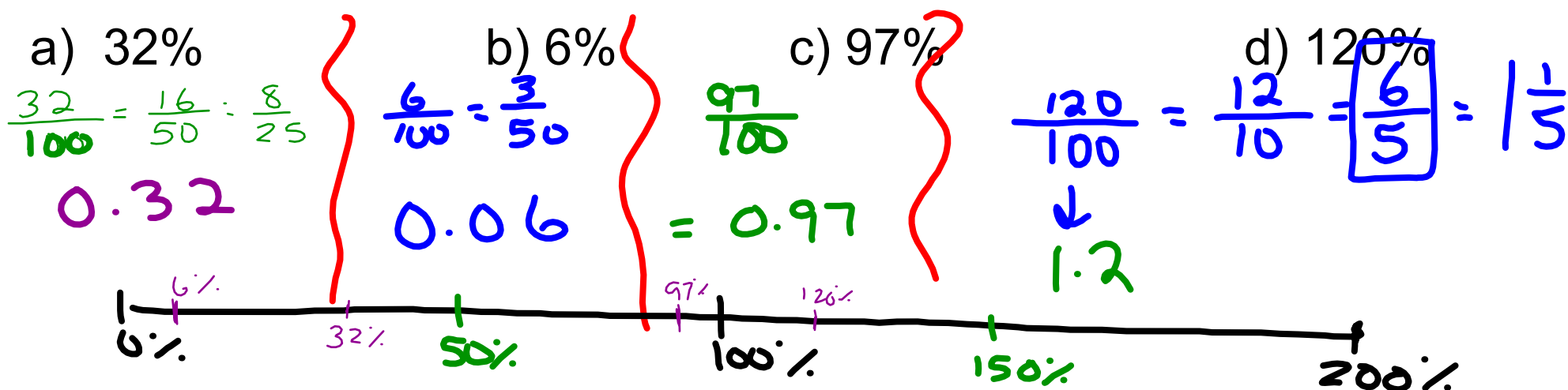
Janet 82%

0.82

Janet did better since $82 > 80$

since $0.82 > 0.8$

Ex) Write each percent as a fraction and a decimal. Sketch a number line to show how the numbers relate.



Ex) Write each percent as a mixed fraction (Reduce)

a) 127% b) 240% c) 115%

$$\frac{127}{100}$$
$$= 1\frac{27}{100}$$

$$\frac{240}{100}$$
$$= 2\frac{40}{100} \xrightarrow[\div 10]{\text{Reduce fraction}}$$
$$= 2\frac{4}{10} \xrightarrow[\div 2]{}$$
$$= \boxed{2\frac{2}{5}}$$

$$\frac{115}{100}$$
$$= 1\frac{15}{100} \xrightarrow[\div 5]{}$$
$$= \boxed{1\frac{3}{20}}$$

Ex) Convert the % to Fraction

13.7%

Cannot have decimal in a fraction

$$\frac{13.7}{100} \times \frac{10}{10}$$
$$\frac{137}{1000}$$
$$0.\underline{1}\underline{3}\underline{7}$$

13.7% → Dec

% → Dec (÷100)

13.7% = 0.137

↓

Place Value

$$\frac{137}{1000}$$

Work Period

Ws Grade 8 Extra practice Fraction decimal percent

Finish sheet from yesterday

Ws Grade 8 Extra practice Fraction decimal percent

Calculator
 Decimal \Rightarrow Top \div Bottom
 % \Rightarrow Dec \times 100

1. Write each fraction as a decimal and a percent.

a) $\frac{21}{35}$

b) $\frac{14}{20}$

c) $\frac{28}{56}$

d) $\frac{12}{16}$

e) $\frac{18}{200}$

f) $\frac{19}{20}$

g) $\frac{16}{25}$

h) $\frac{32}{40}$

i) $\frac{9}{50}$

j) $\frac{9}{10}$

2. Ruth's test scores were: $\frac{17}{20}$, $\frac{21}{28}$, and $\frac{40}{50}$.

Write each test score as a percent.

Order the test scores from greatest to least.

Which was Ruth's best test? How do you know?

3. Write each percent as a fraction and a decimal.

Sketch number lines to show how the numbers are related.

a) 18%

b) 37%

c) 86%

d) 99%

4. In 5 min, Benjamin completed 27 of 30 multiple-choice questions.
Madison completed 83% of the questions.
Who completed more questions?
How do you know?

5. Barney created a design on a grid.
He coloured $\frac{1}{8}$ of the grid red.
He coloured 0.375 of the grid green.
He coloured 40% of the grid blue.
He coloured the rest of the grid purple.
What percent of the grid is purple?
How do you know?

Name: _____

Sec: _____

1) Convert Percent to Fraction

a) 64% =

b) 17% =

c) 9% =

d) 88% =

2) Convert Decimal to Percent

a) 0.12 =

b) 0.96 =

c) 0.45 =

d) 0.3 =

3) Convert Percent to Decimal

a) 22% =

b) 38% =

c) 5% =

d) 3% =

4) Convert Fraction to Percent

a) $\frac{27}{100}$ =

b) $\frac{56}{100}$ =

c) $\frac{14}{100}$ =

d) $\frac{7}{100}$ =

Fraction/Decimal/Percent Conversions

Note: please talk to your instructor for other conversions

Changing fractions to decimals: divide the bottom number into the top number

$$\frac{1}{2} = 2 \overline{)1} = .5 \quad 8\frac{1}{5} \Rightarrow 5 \overline{)1} = 8.2$$

Changing decimals to fractions: place a one under the point and a zero under the digits

$$.7 = \frac{.7}{10} = \frac{7}{10} \quad 3.73 = 3 \frac{.73}{100} = 3 \frac{73}{100} \quad 2.6 = 2 \frac{.6}{10} = 2 \frac{6}{10} = 2 \frac{3}{5}$$

Changing Decimals to Percents: move decimal point two places to right (add zeros)

$$.27 = 27\% \quad 1.4 = 140\% \quad 7 = 700\% \quad .005 = .5\%$$

Changing Percents to Decimals: move the decimal point two places to the left (add zeros)

$$30\% = .30 \quad .57\% = .0057 \quad 8\frac{1}{5}\% \Rightarrow 5 \overline{)1} = 8.2\% = .082$$

Note: place a decimal point even if you don't see one

Practice Read and follow all directions

Directions: Fill in the blanks in the following table. **Reduce fractions to lowest terms. Round decimals to hundredths. Round percents to hundredths.**

Mixed number or fraction	Decimal Number	Percent
$\frac{1}{2}$		
	.336	
		72%
$\frac{3}{5}$		
		$\frac{1}{2}\%$
	1.23	
$\frac{7}{8}$		
		$3\frac{1}{4}\%$
	426.2	
$8\frac{2}{3}$		
	.01	
$5\frac{7}{8}$		