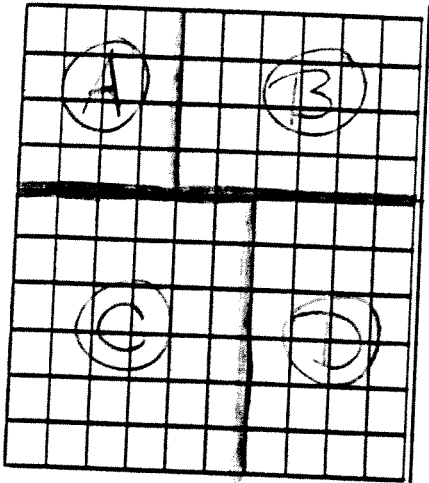


PERCENTAGES

NAME: _____

A. Give the area of each piece in this diagram as a percent of the whole square

①



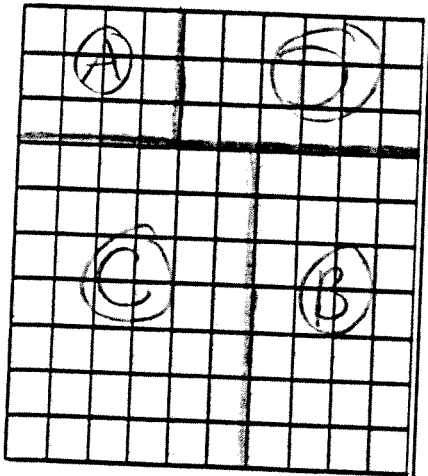
A) _____

B) _____

C) _____

D) _____

②



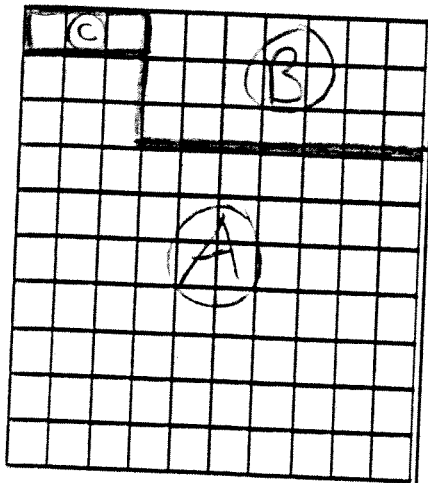
A) _____

B) _____

C) _____

D) _____

③



A) _____

B) _____

C) _____

B. Benchmarking. Complete the following table

①

100%	80 %	60 %	15%	5%
70				

②

100%	70 %	50 %	10%	8%
65				

③

100%	60%	40 %	15%	2%
40				

④

100%	80 %	60 %	15%	5%
84				

Complete the table below using your knowledge of fractions, decimal and percent conversions.

Reduce to lowest terms

Problem	Fraction	Decimal	Percent
1.	$\frac{4}{5}$	0.80	
2.		0.375	37.5%
3.	$\frac{11}{20}$		55%
4.	$\frac{7}{8}$		
5.		0.72	
6.	$\frac{13}{20}$		
7.		0.975	
8.			110%
9.	$\frac{105}{100}$		
10.		0.0048	
11.			112%
12.	$\frac{35}{20}$		


Check What You Know
SHOW YOUR WORK

Finding Percents

Solve each problem.

12. A grocery store is offering a 2% savings if customers bag their own groceries. How much will Akira save on a purchase of \$215.50?

He will save _____.

13. A home improvement company gives a 30% discount for all projects over \$1,000. If the original cost of Praveen's project is \$2,545, how much will he save with the discount?

He will save _____.

14. A restaurant charges an automatic 20% tip for groups of 6 or more. A group of 8 people had a bill of \$187. How much was their tip?

Their tip was _____.

15. A department store has a policy of charging a 15% service charge on all returned checks. If a check for \$725 is returned, how much will the service charge be?

The service charge will be _____.

16. A mail order company charges $4\frac{1}{2}\%$ for shipping and handling on all orders. How much is the shipping and handling charge on an order of \$52?

The shipping charge is _____.

17. The phone company charges a 1.5% service fee on all long distance calls. If a long distance bill is \$32, how much is the service fee?

The service fee is _____.

13.

13.

14.

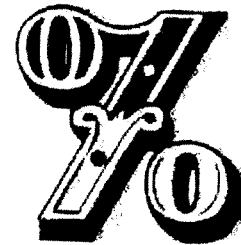
15.

16.

17.



Name: _____

Percentages**Part 1: Convert each percent into a fraction in simplest form.**

a. 25% - _____

b. 4% - _____

c. 68% - _____

b. 20% - _____

d. 50% - _____

e. 7% - _____

Part 2: Convert each fraction into a percent.

f. $\frac{2}{5}$ - _____

g. $\frac{13}{25}$ - _____

h. $\frac{7}{25}$ - _____

i. $\frac{19}{100}$ - _____

j. $\frac{3}{4}$ - _____

k. $\frac{19}{20}$ - _____

Part 3: Find the answer to the word problem.

- l. Maria took a history test with 25 questions on it. She correctly answered 22 questions. Write her test score as a percent.

Lesson 4.1 Understanding Percents

Percent means how many out of 100 and is expressed with the symbol %. Percents can also be expressed as fractions with a denominator of 100 and as decimals.

$$25\% = \frac{25}{100} = \frac{1}{4} \text{ or } 0.25 \quad \text{or} \quad 9\% = \frac{9}{100} \text{ or } 0.09$$

$$20\% = 20 \div 100 = 0.20$$

Complete the following. Write fractions in simplest form.

	Percent	Fraction	Decimal
1.	7%	_____	_____
2.	13%	_____	_____
3.	48%	_____	_____
4.	71%	_____	_____
5.	27%	_____	_____
6.	2%	_____	_____
7.	15%	_____	_____
8.	39%	_____	_____
9.	10%	_____	_____
10.	62%	_____	_____
11.	75%	_____	_____
12.	97%	_____	_____
13.	53%	_____	_____
14.	82%	_____	_____



1. Write each fraction as a percent.

a) $\frac{35}{100}$

b) $\frac{12}{20}$

c) $\frac{9}{25}$

d) $\frac{3}{8}$

2. Write each decimal as a percent.

a) 0.13

b) 0.85

c) 0.07

d) 0.875

3. Write each percent as a fraction

a) 36%

b) 70%

c) 12%

d) 110%

4. Write each percent as a decimal.

a) 31%

b) 12.5%

c) 95%

d) 0.0125%



1. Write each fraction as a percent.

a) $\frac{96}{100}$

b) $\frac{1}{8}$

c) $\frac{6}{25}$

d) $\frac{11}{20}$

2. Write each decimal as a percent.

a) 0.09

b) 0.75

c) 0.14

d) 0.375

3. Write each percent as a fraction.

a) 36%

b) 70%

c) 12%

d) 110%

4. Write each percent as a decimal.

a) 11%

b) 87.5%

c) 45%

d) 0.0625%



Complete the table below using your knowledge of fractions, decimal and percent conversions.

Problem	Fraction	Decimal	Percent
1.	$\frac{8}{10}$	0.80	
2.		0.375	37.5%
3.	$\frac{55}{100}$		55%
4.	$\frac{875}{1000}$		
5.		0.72	
6.	$\frac{65}{100}$		
7.		0.975	
8.			110%
9.	$1\frac{5}{100}$		
10.		0.0046	
11.			112%
12.	$1\frac{75}{100}$		