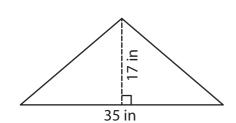
(Area – Mixed Shapes)

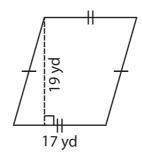
Find the area of each shape.

1)



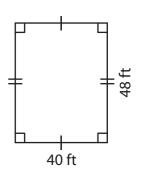
Area = ____

2)



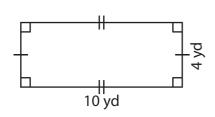
Area = _____

3)



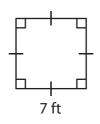
Area = ____

4)



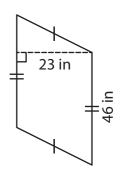
Area = _____

5)



Area = ____

6)



Area = _____

The side of a square measures 45 yards. What is the area of the square? 7)

Find the area of the triangle whose base is 32 inches and height is 16 inches. 8)

Converting Fractions, Decimals, and Percents

Sheet 1

A) Convert the following.

1\		1	
1)	_	2

Decimal : _____

Percent : _____

Percent : _____

Fraction :

3) 1.07

4) 70%

Fraction :

Fraction :

Percent : _____

Decimal : _____

B) Complete the table.

S.no	Fractions	Decimals	Percents
1)	<u>2</u> 5		
2)		0.15	
3)			32%

C) Which of the following fractions is equivalent to 0.09?

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

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

c) $\frac{9}{100}$

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

Converting Fractions, Decimals, and Percents

Sheet 1

A) Convert the following.

1) $\frac{1}{2}$

2) 0.8

Decimal : ______

Percent : **80%**

Percent : _____**50%**

Fraction : 4
5

3) 1.07

4) 70%

Fraction : 107 100

Fraction: 7 10

Percent : **107**%

Decimal : **0.7**

B) Complete the table.

S.no	Fractions	Decimals	Percents
1)	<u>2</u> 5	0.4	40%
2)	3 20	0.15	15%
3)	<u>8</u> 25	0.32	32%

C) Which of the following fractions is equivalent to 0.09?

- a) $\frac{9}{10}$
- b) $\frac{100}{9}$
- $r) \frac{9}{100}$
- d) $\frac{10}{9}$

Converting Fractions to Percents

A) Convert the following fractions to percents.

1)
$$\frac{1}{8}$$
 = _____

2)
$$\frac{6}{80} =$$

3)
$$\frac{7}{25} =$$

7)
$$\frac{8}{5} =$$

5)
$$\frac{1}{125} =$$

6)
$$\frac{13}{80} =$$

7)
$$\frac{5}{4} =$$

8)
$$\frac{48}{120} =$$

Match each fraction with its equivalent percent.

1)
$$\frac{3}{20}$$
 •

2)
$$\frac{36}{160}$$

3)
$$\frac{1}{40}$$
 •

C) Which of the following is equivalent to $\frac{9}{200}$?

- a) 405% b) 4.5%
- c) 45%
- d) 40.5%

Converting Fractions to Percents

A) Convert the following fractions to percents.

1)
$$\frac{1}{8} =$$
12.5%

2)
$$\frac{6}{80} =$$
7.5%

3)
$$\frac{7}{25} = 28\%$$

7)
$$\frac{8}{5} = 160\%$$

5)
$$\frac{1}{125} =$$
0.8%

6)
$$\frac{13}{80} =$$
16.25%

7)
$$\frac{5}{4} =$$
 125%

8)
$$\frac{48}{120} = \frac{40\%}{120}$$

B) Match each fraction with its equivalent percent.





3)
$$\frac{1}{40}$$
 22.5%

C) Which of the following is equivalent to $\frac{9}{200}$?

- a) 405% **b)** 4.5%
- c) 45%
- d) 40.5%

Name:

Order of Operations: Exponents

L2MS1

Solve.

1)
$$5^2 + 26 \div 2 - 67$$

Ans =

2)
$$16 \times 2^3 - 19 + 3^2$$

Ans =

3)
$$19 - 10 \div 5 + 6^2 \times 2$$

Ans =

4)
$$4^2 \times 3 - 2^4 + 21 \div 7$$

Ans =

5)
$$8^2 + 1 \times 5 - 45$$

Ans =

6)
$$24 \div 3 + 5^3 - 13^2$$

Ans =

7)
$$48 \div 12 - 4^3 + 3$$

Ans =

8)
$$9^2 + 2 \times 3 \div 6 - 49$$

Ans =

9)
$$3 \times 2^5 + 15 - 12^2$$

Ans =

10)
$$8 + 88 \div 11 - 4^3 + 2$$

Ans =

One-Step Equations: Integers Mixed Operations Level 1: S1

1)
$$10 = z + 6$$

2)
$$8y = 48$$

3)
$$q - 12 = 1$$

4)
$$18 = \frac{a}{2}$$

5)
$$\frac{r}{3} = 7$$

6)
$$11 = m - 4$$

7)
$$t - 19 = 2$$

8)
$$1 + s = 3$$

9)
$$24 = 4c$$

10)
$$\frac{V}{5} = 9$$

Answer Key

One-Step Equations: Integers

Mixed Operations Level 1: S1

1)
$$10 = z + 6$$

2)
$$8y = 48$$

$$z = 4$$

$$y = 6$$

3)
$$q - 12 = 1$$

4)
$$18 = \frac{a}{2}$$

$$q = 13$$

$$a = 36$$

5)
$$\frac{r}{3} = 7$$

6)
$$11 = m - 4$$

$$r = 21$$

$$m = 15$$

7)
$$t - 19 = 2$$

8)
$$1 + s = 3$$

$$t = 21$$

$$s = 2$$

9)
$$24 = 4c$$

10)
$$\frac{V}{5} = 9$$

$$c = 6$$

$$v = 45$$

(One-Step Equations: Integers) Mixed Operations Level 2: S1

1)
$$3 + a = -13$$

2)
$$y - 10 = -5$$

3)
$$-6s = 35$$

4)
$$-5 = -\frac{k}{8}$$

5)
$$m + 2 = -7$$

6)
$$\frac{b}{2} = -1$$

7)
$$7 = t - 3$$

8)
$$18z = -9$$

9)
$$-\frac{p}{6} = 9$$

10)
$$-4 + w = -12$$

Answer Key

One-Step Equations: Integers

Mixed Operations Level 2: S1

1)
$$3 + a = -13$$

2)
$$y - 10 = -5$$

$$a = -16$$

$$y = 5$$

3)
$$-6s = 35$$

4)
$$-5 = -\frac{k}{8}$$

$$s = -\frac{35}{6} \text{ or } -5\frac{5}{6}$$

$$k = 40$$

5)
$$m + 2 = -7$$

6)
$$\frac{b}{2} = -1$$

$$m = -9$$

$$b = -2$$

7)
$$7 = t - 3$$

8)
$$18z = -9$$

$$z=-\frac{1}{2}$$

9)
$$-\frac{p}{6} = 9$$

10)
$$-4 + w = -12$$

$$p = -54$$

$$w = -8$$

Name:

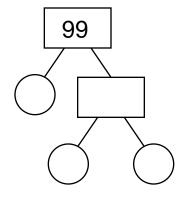
Score:

Teacher:

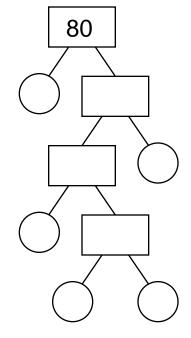
Date:

Find the Prime Factors of the Numbers

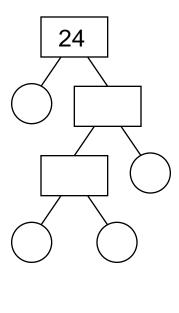
1)



2)



3)



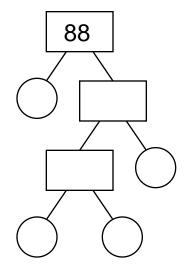
Prime Factors

$$_{x}_{x}_{x}_{y} = 99$$

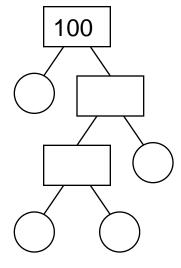
Prime Factors

Prime Factors

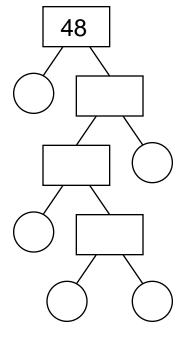
4)



5)



6)



Prime Factors

Prime Factors

Prime Factors

Name : _____

Score:

Date:

Teacher:

Dividing Fractions

1)
$$\frac{2}{4} \div \frac{2}{3} =$$

2)
$$\frac{2}{10} \div \frac{2}{3} =$$

3)
$$\frac{1}{4} \div \frac{1}{3} =$$

4)
$$\frac{1}{2} \div \frac{8}{10} =$$

5)
$$\frac{6}{10} \div \frac{4}{5} =$$

6)
$$\frac{1}{3} \div \frac{2}{4} =$$

7)
$$\frac{4}{5} \div \frac{1}{2} =$$

8)
$$\frac{3}{10} \div \frac{1}{2} =$$

9)
$$\frac{1}{2} \div \frac{1}{3} =$$

10)
$$\frac{7}{10} \div \frac{3}{5} =$$

Name : _____

Score:

Date:

Dividing Fractions and Whole Numbers

1)
$$6 \div \frac{2}{4} =$$

Teacher:

2)
$$\frac{1}{3} \div 8 =$$

3)
$$\frac{1}{2} \div 6 =$$

4)
$$\frac{3}{4} \div 3 =$$

5)
$$7 \div \frac{1}{2} =$$

6)
$$\frac{2}{3} \div 9 =$$

7)
$$3 \div \frac{2}{3} =$$

8)
$$10 \div \frac{1}{2} =$$

9)
$$\frac{2}{4} \div 2 =$$

10)
$$\frac{2}{3} \div 8 =$$

11)
$$\frac{1}{10} \div 6 =$$

12)
$$7 \div \frac{3}{4} =$$

13)
$$\frac{2}{3} \div 10 =$$

14)
$$7 \div \frac{3}{4} =$$

15)
$$\frac{2}{5} \div 4 =$$

Name:

Score:

Teacher:

Date:

Complete the function table for each equation.

1) y = x + 9

X	У
0	
3	
5	
2	
8	

5)

$$y = 9x$$

X	У
8	
9	
3	
4	
0	

9)

$$y = x + 3$$

X	У
7	
3	
0	
9	
5	

2)

$$y = x - 5$$

X	У
5	
8	
7	
6	
1	

$$(6)$$
 $y = -2x$

X	у
6	
3	
4	
9	
7	

10)

$$y = 7x$$

X	у
8	
6	
2	
9	
3	

3)

$$y = 8x$$

X	у
9	
3	
8	
2	
1	

7)

$$y = x - 7$$

X	y
9	
7	
3	
6	
0	

11)

$$y = -3x$$

X	у
8	
3	
7	
5	
6	

4)

$$y = -8x$$

X	У
1	
3	
5	
7	
9	

$$8)$$
 $y = x + 6$

X	У
5	
9	
4	
7	
2	

12)

$$y = x - 9$$

X	У
3	
5	
4	
6	
9	



(Integers - MCQ)

Sheet 1

Which integer is greater than –5? 1)

How many integers are there between -8 and 2? 2)

What is the opposite value of the integer 6? 3)

4) Identify the integer that is less than –3.

Which of the following integers is greater than -1 and lesser than 7?

How many pairs of opposite integers are there between -4 and 5? 6)

- a) 3
- b) 8
- c) 2
- d) 6

The following data shows the changes in temperatures across various cities from 7) morning to noon. Which city recorded the maximum temperature?

Answer key

Integers - MCQ

Sheet 1

Which integer is greater than –5? 1)

How many integers are there between -8 and 2? 2)

- a) 7
- b) 4
- c) 0

What is the opposite value of the integer 6? 3)

- -6 b) 5
- c) 6
- d) -4

4) Identify the integer that is less than –3.

- a) 0
- b) -1
- d) 2

Which of the following integers is greater than -1 and lesser than 7?

- a) –9
- **b**) 5 c) -5 d) 8

How many pairs of opposite integers are there between -4 and 5? 6)

- b) 8
- c) 2
- d) 6

The following data shows the changes in temperatures across various cities from 7) morning to noon. Which city recorded the maximum temperature?

- a) 20°C Atlanta
- b) 13°C Chicago
- c) 12°C **Boston**

(Integers) L2S1

Simplify.

4)
$$(-8) \times (-11) =$$

16)
$$(-21) \div 3 =$$

Answer key

Integers

L2S1

Simplify.

4)
$$(-8) \times (-11) =$$
 88

6)
$$28 \div (-2) = _____14$$

7)
$$(-16) \div (-4) =$$
 4

8)
$$(-31) + 50 = ____$$

9)
$$(-3) \times 17 = -51$$

10)
$$(-57) - (-29) =$$

11)
$$40 \div 5 = 8$$

12)
$$19 \times (-9) =$$

13)
$$(-25) + (-77) =$$
 14) $76 - 34 =$ 42

Mean, Median, Mode & Range

Level 1: S1

Find the mean, median, mode and range for each set of numbers.

1) 24, 31, 12, 38, 12, 15

2) 5, 28, 16, 32, 5, 16, 48, 29, 5, 35

Mean: Median:

Mean : Median :

Mode : _____ Range : ____

Mode : _____ Range : _____

53, 13, 34, 41, 26, 61, 34, 13, 69 4) 85, 58, 72, 85, 46, 93 3)

Mean: Median:

Mean : _____ Median : _____

Mode : _____ Range : ____

Mode: Range:

5) 92, 63, 22, 80, 63, 71, 44, 35

6) 39, 82, 74, 96, 64, 52, 74

Mean: Median:

Mean: Median:

Mode : _____ Range : ____

Mode : _____ Range : _____

7) 72, 43, 15, 66, 32, 72, 52, 19, 28, 81 8) 40, 90, 36, 68, 90, 11, 88, 54

Mean: ____ Median: ____

Mean : _____ Median : _____

Mode : Range :

Mode: Range:

9) 12, 46, 32, 18, 26, 41, 46

10) 63, 40, 51, 70, 36, 21, 51, 28, 19

Mean : _____ Median : _____

Mean : _____ Median : _____

Mode : Range :

Mode : _____ Range : _____

$\{$ Opposite Integers $\}$

Sheet 1

A) Write the opposite value of each integer.

1) Opposite of 12 _____

2) Opposite of –25 _____

3) Opposite of –99 _____

4) Opposite of 4 _____

5) Opposite of 36 _____

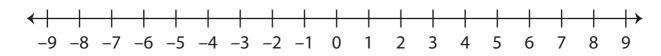
6) Opposite of –57 _____

B) Mark each integer given below and its opposite value on the number line.

1) 2



2) –5



3) 1

C) Evaluate each expression.

1) Opposite of –(–24)

2) Opposite of +(-8)

3) Opposite of +(+15) _____

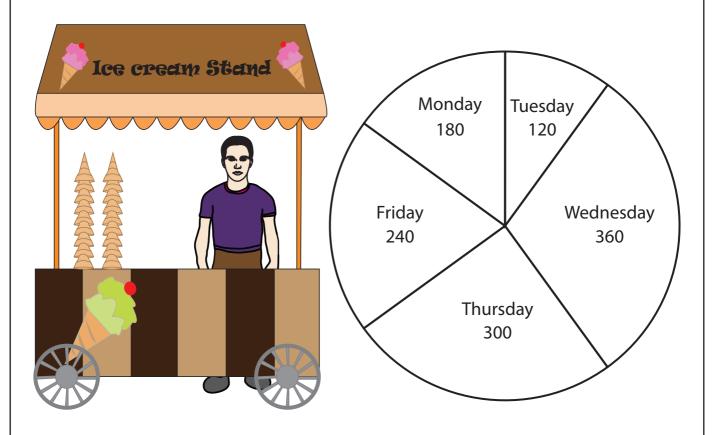
4) Opposite of –(+33) _____

5) Opposite of +(-40)

6) Opposite of –(–6) _____

Pie Graph - Icecream Sales

John, an ice cream seller sells ice cream during weekdays. The pie graph display the number of ice cream sold. Study the pie graph and answer the questions.



- 1. What is the percentage of ice cream sold on Thursday?
- 2. What are the two days that equal the sales on Wednesday?
- 3. When did John sell most of the ice cream in his stand?
- 4. On which day 300 ice creams were sold?
- 5. What is the difference in percentage of ice cream sold between Wednesday and Friday?

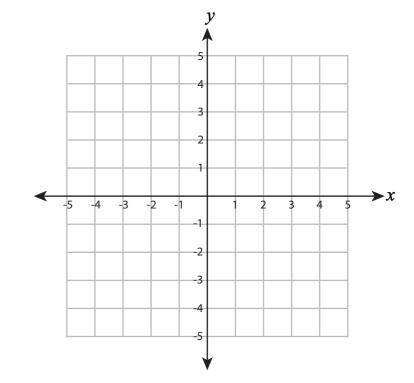
Plotting Points

A) Plot each point on the coordinate grid.

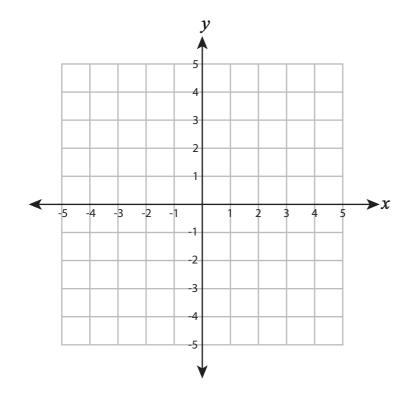








B) Draw each shape on the coordinate grid.



- 11) Draw O at (3, -4)
- 12) Draw ☆ at (-5, 5)
- 13) Draw □ at (3, 0)
- 14) Draw △ at (-1, -4)
- 15) Draw \square at (4, 4)

Name : Teache			Score : Date :	
	Working with the Prop	ert	ies of Mathematics	
1) Which e	equation shows the Addition Property of Zero	o ?		
A.	a + 0 = a	В.	(a + b) + 7 = a + (7 + b)	
C.	$a \times 0 = 0$	D.	a(b + c) = ab + ac	
2) Which p	property is used in the following expression '	?	$(a \times b) \times c = a \times (b \times c)$	
A.	Associative Property of Addition	В.	Distributive Property	
C.	Commutative Property of Addition	D.	Associative Property of Multiplication	
3) Which c	of the following does not show the Commuta	tive	Property ?	
A.	x + y = y + x	В.	yx = xy	
C.	7 + y = y + 7	D.	xy - 2 = xy	
4) Which p	property is used in the following expression '	?	3(8 + 5) = 24 + 15	
Α.	Associative Property of Multiplication	В.	Associative Property of Addition	
C.	Commutative Property of Addition	D.	Distributive Property	
5) Simplify	this expression : 4(y + z)			
Α.	4yz	В.	4y + 4z	
C.	4z + y	D.	4y + z	
6) Which F	Property of Multiplication is shown? (6 + 5	5) x	2 = 6 x 2 + 5 x 2	
Α.	Commutative Property	В.	Identity Property	
C.	Distributive Property	D.	Associative Property	
7) Which is	s an example of Associative Property of Ado	ditio	n ?	
,	8+7=7+8		(7+5)+9=7+(5+9)	
			·	

C.
$$4 + 0 = 4$$

D.
$$2 + (-2) = 0$$

8) Which of the following is an example of Commutative Property of Addition?

A.
$$(6+4)+3=6+(4+3)$$

C.
$$7 \times 1 = 7$$

B.
$$9 + 6 = 6 + 9$$

D.
$$2 + 5 = 8 + 2$$

9) Which property is used in the following? $5 \times (3 + 4)$

$$5 \times (3 + 4) = 5 \times 3 + 5 \times 4$$

10) Which operation will not change the value of any nonzero number ?





Name :	Score :	
Teacher:	Date :	

Working with the Properties of Mathematics

11 '	Which property	v is used in the	following expression	? (2 x 4	$) \times 7 = 4 \times 6$	(7 x 2
	VVIIIGII DIODGIL	y is used in the	TOTIOWING EXPLESSION	: (4 ^ 7	,	(

12) Which property of addition is used in the following?
$$(2+9)+8=2+(9+8)$$

13) Which property would you use to simplify the following expression?
$$5(y + 6)$$

A.
$$9 + x = x + 9$$
 B. $ab = ba$

C.
$$a + b = b + a$$
 D. $3x + 4y = 4y + 3x$

A.
$$6 \times 0 = 0$$
 B. $4 \times 1 = 4$

C.
$$7 \times 3 = 3 \times 7$$
 D. $8 + 8 + 8 = 3 \times 8$

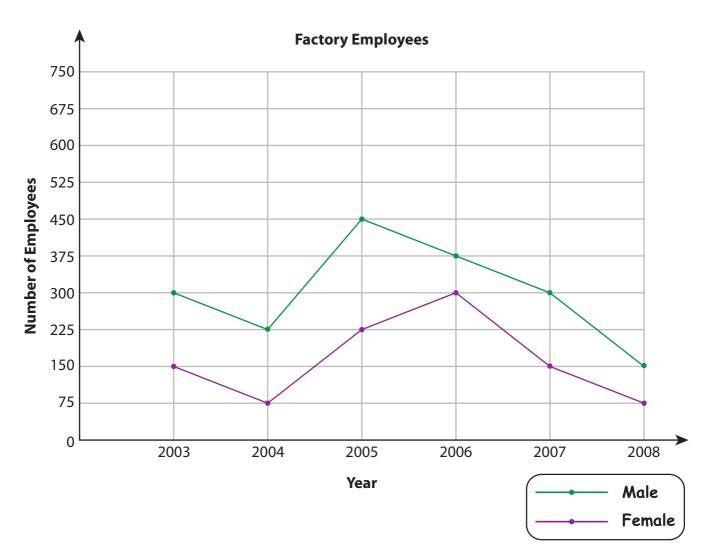
A.
$$7 \times 1 = 7$$
 B. $6 \times 4 - 9 \times 4 = (6 - 9) \times 2$

C.
$$3 \times 8 = 8 \times 3$$
 D. $2 \times 3 = 2 + 2 + 2$



Double Line Graph - Factory Employees

A production company has both male and female staff working in the assembly unit. The graph shows the number of male and female employees in the company from 2003 to 2008. Read the graph and answer the questions.



- 1) Which year had the most number of female employees?
- 2) How many employees worked in the year 2003?
- 3) Which year had 225 male and female employees altogether?
- 4) What is the difference on the number of male and female employees during the year 2004?
- 5) Were the number of male employees more compared to the female employees in the year 2005? Yes or No.

Name : _____

(Standard and Scientific Notations)—

Positive: MS2

A) Express each number in scientific notation.

B) Express each number in standard notation.

1)
$$1 \times 10^{13}$$
 =

4)
$$1.562 \times 10^6$$
 = _____

5)
$$4.2 \times 10^{11}$$
 =

2) 1,020,000

Answer Key

(Standard and Scientific Notations)—

Positive: MS2

A) Express each number in scientific notation.

1)
$$3,001,500,000,000 = 3.0015 \times 10^{12}$$

3)
$$75,820,000 = 7.582 \times 10^7$$

4)
$$256,000,000,000 = 2.56 \times 10^{11}$$

B) Express each number in standard notation.

1)
$$1 \times 10^{13}$$
 = 10,000,000,000

2)
$$7.0128 \times 10^{15} = 7,012,800,000,000$$

3)
$$9.25 \times 10^9$$
 = **9,250,000,000**

4)
$$1.562 \times 10^6$$
 = **1,562,000**

5)
$$4.2 \times 10^{11}$$
 = **420,000,000**

Simplify each radical.

$$\sqrt{100} =$$

$$\sqrt{81} =$$

$$\sqrt{36}$$
 =

$$\sqrt{121} =$$

$$\sqrt[3]{1000} =$$

$$\sqrt{144} =$$

$$\sqrt{64} =$$

Squaring Numbers

Whole Numbers: S1

A) Find the values of the following.

1) 7²

2) 13²

3) 4²

4) 25^2

5) 42²

6) 10^2

B) Find the squares of the following numerals.

1) 5

2) 49

3) 17

4) 21

5) 3

6) 34

C) 1) Which of the following is the square of 20?

i) 40

ii) 200

iii) 400

iv) 220

2) Which of the following is equal to 44²?

i) 1,936

ii) 1,863

iii) 1,369

iv) 1,963

Squaring Numbers

Whole Numbers: S1

A) Find the values of the following.

1) 7²

2) 13²

3) 4²

49

169

16

4) 25^2

5) 42^2

6) 10²

625

1,764

100

B) Find the squares of the following numerals.

1) 5

2) 49

3) 17

25

2,401

289

4) 21

5) 3

6) 34

441

9

1,156

C) 1) Which of the following is the square of 20?

i) 40

ii) 200

iii) 400

iv) 220

2) Which of the following is equal to 44²?

i) 1,936

ii) 1,863

iii) 1,369

iv) 1,963

Fill in the measures of the unknown angles.

