

Primary Four

First term

2021/2022

Name:

Class:

Unit (1)

Lesson 1

(Digit, Number, Numeral)

Write each number in the suitable column

(Some numbers may belong to many columns)

0 - seven - Fifty two - 765

Three hundred - 4,569,321 - 8

Eighty nine thousands four hundred sixty two

Digit	Number	Numeral

Choose:-

1) 3 represents a

(Digit – number – both of them).

2) All digits are

(Numbers – Digits – Digits and numbers).

3) Five thousands represents.....

(Number – Digit – Numeral).

4) 999 represents a

(Digit – number – both of them).

5) Numbers are

(Finite – Infinite).

6) Two hundred forty five is a

(Number – Digit – Numeral)

Use the following digits to make the greatest number possible: 2, 8, 0, 4, 6.

.....

(Really Big Numbers)

Note: 1 Milliard = 1 Billion

Example: In the following number (5176984302)

- ❖ Which digit is in (Milliards) billions place?
- ❖ Which digit is in hundred thousand place?
- ❖ Which digit is in million place?
- ❖ Which digit is in thousands place?
- ❖ Which digit is in ten millions place?
- ❖ Which digit is in hundreds place?

Example: Use the following number (9 3 5 2 0 8 7 1 6 4)

- ❖ Put a line under the million place.
- ❖ Put a circle around the thousands place.
- ❖ Put a square around the ones place.
- ❖ Put a triangle around the milliards (billions) place.

Example:- Is the digit 5 always equal 5 (● ● ● ● ●)?

Yes or No? Why?

.....
.....

Write the following numbers in the place value table:-



5,740,294

Milliards (Billions)	Millions			Thousands					
Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones

91,475,083

Milliards (Billions)	Millions			Thousands					
Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones

9,752,546,581

Milliards (Billions)	Millions			Thousands					
Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones

Read and write the number as the example:-

- ❖ 8,453,324 = 8 million and 453 thousands and 324
- ❖ 2,356,908,765 =Billions (milliards) and.....millions
andthousands and
- ❖ 98,670,432 = millions and Thousands and
- ❖ 623,409,854 = millions andThousands and

Complete:-

- ❖ The greatest 7 -digit number is
- ❖ The smallest 7- digit number is
- ❖ The greatest different 7 -digit number is
- ❖ The smallest different 7 -digit number is
- ❖ The greatest 8 -digit number is
- ❖ The smallest 8 -digit number is
- ❖ The greatest different 9 -digit number is
- ❖ The smallest 9 -digit number is
- ❖ The smallest 10- digit number is

Lesson 3

(Changing Values)

Example:- For the digit 4 :-

- ❖ The value of digit 4 in the ones place is
- ❖ The value of digit 4 in the tens place is
- ❖ The value of digit 4 in the hundreds place is
- ❖ The value of digit 4 in the thousands place is
- ❖ The value of digit 4 in the ten thousand place is
- ❖ The value of digit 4 in the hundred thousand place is
- ❖ The value of digit 4 in the million place is
- ❖ The value of digit 4 in the ten million place is
- ❖ The value of digit 4 in the hundred million place is
- ❖ The value of digit 4 in the billion (milliard) place is

What did you notice?

.....

.....

.....

.....

Write the value and the place value for the digit 6 in the following numbers:-



Number	The value	The place value
1,839,576		
1,839,567		
1,839,657		
1,836,957		
1,863,957		
1,683,957		
6,183,957		

Complete:-

- ❖ The value of 8 in the billion (milliard) place is
- ❖ The value of 3 in the ten millions place is
- ❖ 32 millions = =thousands
- ❖ 5 billions = =millions
- ❖ 81 thousands = =hundreds =tens
- ❖ 37 ten thousand = =thousands =tens
- ❖ 12 hundreds thousands = =thousands
=hundreds

Lesson 4

(Comparing Values)

Complete:-

- 1) (2 hundreds and 5 tens) $\times 10 = \dots\dots\dots$
- 2) (5 thousands and 7 hundreds) $\times 100 = \dots\dots\dots$
- 3) (3 ten thousands and 8 thousands) $\times 1000 = \dots\dots\dots$
- 4) (8 hundred thousand and 3 ten thousands) $\times 10 = \dots\dots\dots$
- 5) (7 million and 5 hundreds thousands) $\times 10 = \dots\dots\dots$
- 6) (4 million and 9 hundred thousands) $\times 10 = \dots\dots\dots$
- 7) (2 ten millions and 3 million) $\times 100 = \dots\dots\dots$
- 8) (3 thousands and 7 hundreds) $\times 1,000 = \dots\dots\dots$
- 9) (9 hundred and 9 ten) $\times 10,000 = \dots\dots\dots$
- 10) (5 million and hundred thousands) $\times 10 = \dots\dots\dots$
- 11) (1 million and 6 hundreds) $\times 10 = \dots\dots\dots$
- 12) (3 hundred thousand and 7 thousands) $\times 100 = \dots\dots\dots$
- 13) (1 milliard and 5 millions) $\times 10 = \dots\dots\dots$



- Pr.4 (first term 2021 / 2022)

Lesson 5



(Many Ways to Write)

Form the greatest numbers from the following digits the complete:-

1	9	5	2	4	7	3	6	8
---	---	---	---	---	---	---	---	---

a) _____

Standard form:

Expanded form:

Word form:

b) _____

Standard form:

Expanded form:

Word form:

c) _____

Standard form:

Expanded form:

Word form:

(Composing and Decomposing)

Compose and decompose as the example:-

a) Composing number: 345,532

Decomposing number: $(3 \times 100,000) + (4 \times 10,000) +$
 $(5 \times 1,000) + (5 \times 100) + (3 \times 10) + (2 \times 1)$

Milliard	Millions			Thousands			Units		
ones	hundreds	tens	ones	hundreds	tens	ones	hundreds	tens	ones
				3	4	5	5	3	2

b) Composing number: 5,786,206,324

Decomposing number:

Milliard	Millions			Thousands			Units		

c) Composing number: 9,473,641,506

Decomposing number:

.....

Milliard	Millions			Thousands			Units		

d) Composing number: 1,087,876,578

Decomposing number:

.....

Milliard	Millions			Thousands			Units		

Decompose the numeral using expanded form: 67 million, 38 thousand, 12

.....

(Comparing Really Big Numbers)

Complete:-

56,340,608 <

..... > 43,051,289

1,850,462,907 >

..... < 10,099,876

The number that is increased 10 than 78,324,215 is

The number that is increased 700 than 5,686,513,215 is

The number that is increased million than 31,256,761 is

The number that is decreased 10 than 856,412,143 is

The number that is decreased 1,000 than 5,222,333 is

The number that is decreased 100 million than

258,714,266 is

(Comparing Numbers in Multiple Forms)



Put (<, =, >):-

1) 999,988,000 () 99,879,999

2) 100,000,000 () 99,568,789

3) 327,800,415 () 415 + 800 thousands + 327millions

4) 85,200,000 () 200 thousands + 85

5) 400,000 + 8,000 + 200 +10 () 40,000 + 8,000 + 200 +20

6) ($6 \times 100,000$) + ($5 \times 10,000$) + ($4 \times 1,000$) + (3×100) ()

($6 \times 1,000,000$) + ($5 \times 100,000$) + ($4 \times 10,000$) + ($3 \times 1,000$)

7) Seventeen millions , four hundred and twenty five thousands ,

six hundreds and three () 25,624,565

8) 1,000,000,000 () 999,999,999

Arrange in ascending order:-

709,265 - 98,796 - 805,100 - 709,267

..... - - -

4,000,000 - 3,999,000 - 3,999,889 - 3,999,799

..... - - -

777,777 - 1,888,777 - 1,777,999 - 7,000,000

..... - - -

3,452,987,186 - 3,452,987,086 - 3,452,987,386 - 3,452,987,586

..... - - -

Arrange in ascending order using standard form:-

- Three hundred and sixty , eighty one
- Nine millions , two thousands and ten
- ($4 \times 1,000,000,000$) + ($4 \times 100,000$) + (6×10)
- 6,400,042

.....

.....

.....

.....

Arrange in descending order:-

892,215 - 992,215 - 792,215 - 492,215

..... - - -

6,457,989 - 6,456,211 - 6,462,989 - 2,000,000

..... - - -

1,654,321 - 1,143,265 - 1,645,121 - 1,142,365

..... - - -

1,000,000,001 – 1,000,100,000 – 1,001,000,000 – 1,000,000,010

..... - - -

Arrange in descending order using standard form:-

- Two hundreds and forty four thousands , eleven
- Three milliards , twelve millions and one thousand
- $6,000,000,000 + 40,000,000 + 5,000,000 + 10,000 + 90$
- 6,025,060,990

.....

.....

.....

.....

1) Create a number in the Hundred Thousands that is less than 893,824.

.....

2) Create a number in the Ten Millions that is greater than 34,450,600,125.

.....

3) Create a number in the Billiards that is greater than 3,456,789,000.

.....

4) Create a numeral that is greater than 682,367, and a numeral that is less than 683,367. Then, write all three numerals in ascending order.

.....

.....

.....

5) Create a numeral that is greater than 4,195,168 and a numeral that is less than 4,199,264,318. Then, write all three numerals in descending order.

.....

.....

.....

(Predicting the Unpredictable)

Use front-end strategy to estimate:-

- 1) 4,563,217 is closer to
- 2) 5,478,654 is closer to
- 3) 550 hundred is closer to
- 4) $30,000,000 + 70,000 + 900 + 40 + 5$ is closer to
.....
- 5) $6,000,000 + 6,000 + 20$ is closer to
- 6) Nine millions, fifty thousands and sixteen is closer to
.....
- 7) 2 milliards, 600 million, 794 thousands and 124 is closer
to
- 8) $(1) + (8 \times 10) + (9 \times 100) + (5 \times 10,000) +$
 $(6 \times 1,000,000)$ is closer to
- 9) $8 + 50 + 7,000 + 60,000 + 3,000,000$ is closer to
.....
- 10) 7,596,321,412 is closer to

Choose the suitable estimation:-

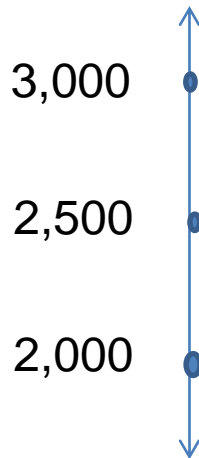


- 1) 9,632,547 estimation (9,000 or 9,000,000 or 960,000)
- 2) 624,554,444 estimation
(600,000,000 or 6,000,000 or 600000)
- 3) 820 hundreds estimation (80,000 or 8,000 or 82000)
- 4) 350 thousands estimation (300,000 or 3,000 or 300)
- 5) 70,000 + 80 + 9 estimation (70,000 or 7,000 or 7800)
- 6) 900,000 + 8,000 + 20 estimation (900 or 900,000 or 9)
- 7) 550 hundreds estimation (500,000 or 50,000 or 500)
- 8) 350 thousands estimation (3,000 or 300,000 or 300)
- 9) 98 millions 789 thousands estimation
(900,000 or 90,000,000 or 90,000)
- 10) 354 millions 400 thousands and 10 estimation
(300,000 or 3,000,000 or 300,000,000)

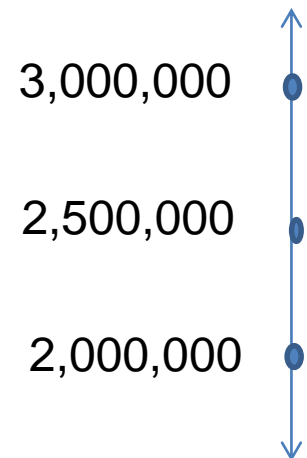
(Rounding Rules)

Use mid-point strategy to estimate:-

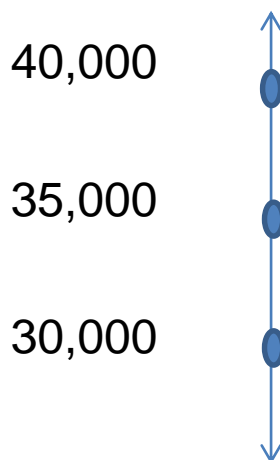
2,580 \approx



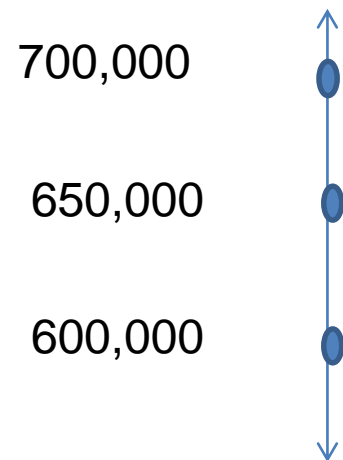
2,810,002 \approx



30,045 \approx



620,594 \approx



Round the following:-

362 \simeq (Nearest 100)

85,236 \simeq (Nearest 1,000)

756,324 \simeq (Nearest ten thousands)

6,547,812 \simeq (Nearest million)

75,539,546 \simeq (Nearest ten thousands)

421 \simeq (Nearest ten)

270,958,704 \simeq (Nearest ten)

270,958,125 \simeq (Nearest 1,000)

457,366 \simeq (Nearest 100,000)

Ahmed has 45,254,465 L.E round to the nearest ten million

.....
.....

Lilia has 488,444,662 ants round to the nearest hundreds million

.....
.....

Unit (2)

Lesson 1

(Properties of Addition)

Complete:-

Problem	problem	Properties
$15+20+13 = \dots\dots\dots$	$13+15+20 = \dots\dots\dots$	$\dots\dots\dots$
$0 + 4,502 = \dots\dots\dots$	$4,502 + 0 = \dots\dots\dots$	$\dots\dots\dots$
$(40+21)+36 = \dots\dots\dots$	$40+(21+36) = \dots\dots\dots$	$\dots\dots\dots$
$200+0+43 = \dots\dots\dots$	$43+0+200 = \dots\dots\dots$	$\dots\dots\dots$
$50+12+8 = \dots\dots\dots$	$8+50+12 = \dots\dots\dots$	$\dots\dots\dots$
$18+34+20 = \dots\dots\dots$	$20+18+34 = \dots\dots\dots$	$\dots\dots\dots$
$56,248 + 0 = \dots\dots\dots$	$0 + 56,248 = \dots\dots\dots$	$\dots\dots\dots$
$(20+37)+40 = \dots\dots\dots$	$20+(37+40) = \dots\dots\dots$	$\dots\dots\dots$

Lesson 2



(Mental Math Strategies)

Use the result by using front end strategy:-

a) $6,938,172 + 7\,234\,619 =$

.....

b) $5,436,467 + 92,549,861 =$

.....

c) $3,207,817 + 6,142,908 =$

.....

d) $1,920,021 + 5,345,765 =$

.....

Use the result by using rounding to nearest 1,000

a) $5,416 + 4,216 =$

b) $5,768 + 4,678 =$

c) $3,674 + 5,873 =$

Use the result by using Decomposing numbers

$$361 + 256 = \dots\dots\dots$$

$$325 + 524 = \dots\dots\dots$$

$$354 + 421 = \dots\dots\dots$$

$$828 + 151 = \dots\dots\dots$$

Use the result by using one of mental math strategies

$$118 + 432 = \dots\dots\dots$$

$$135 + 215 = \dots\dots\dots$$

$$398 - 146 = \dots\dots\dots$$

$$588 - 217 = \dots\dots\dots$$

(Addition with Regrouping)

1) Find the result:-

a) 7,854,216

+ 6,235,105

b) 985,642

+ 318,701

c) 967,348

+ 9,628,567

d) $1,258,234 + 378,065 = \dots\dots\dots$

e) $713,819 + 173,084 = \dots\dots\dots$

f) $76,435,819 + 15,102,304 = \dots\dots\dots$

g) $3,800,700,000 + 123,432,806 = \dots\dots\dots$

(Subtraction Strategies)

Find the result by using one of subtraction strategies

a) $228 - 102 = \dots\dots\dots$

b) $519 - 324 = \dots\dots\dots$

c) $369 - 242 = \dots\dots\dots$

d) $394 - 221 = \dots\dots\dots$

e) $633 - 532 = \dots\dots\dots$

f) $586 - 321 = \dots\dots\dots$

g) $766 - 564 = \dots\dots\dots$

h) $1,325 - 920 = \dots\dots\dots$

i) $10,000 - 350 = \dots\dots\dots$

j) $8,497 - 1,246 = \dots\dots\dots$

(Subtraction with Regrouping)

1. Use the standard subtraction algorithm to solve the problem. Then, round each number to the nearest Thousand.

$$13,526 - 2,834 = \dots\dots\dots$$

.....

2. Use the standard subtraction algorithm to solve the story problem. Then, round each number to the nearest hundred.

A local bakery sold 1,232 zalabya in one day. If they sold 876 zalabya in the morning, how many were sold during the rest of the day?

Solve the following problems using the standard subtraction algorithm. Then, round each number to the nearest Thousand

$$17,525 - 13,708 =$$

$$431,925 - 204,835 =$$

$$61,851 - 52,670 =$$

(Bar Models, Variables, and Story Problems)

Answer the questions

1. Seth took some steps on Monday. He walked 10,075 more steps on Tuesday. Now Seth has a total of 78,200 steps. How many steps did he take on Monday?

2. $152,350 = c + 42,125$

Solution:

3. $z - 10,780 = 101,375$

Solution:

$$4. 425 + d = 15,000$$

Solution:

$$5. 7,691 - f = 1,000$$

Solution:

$$6. 36 + x = 57$$

Solution:

(Solving Multistep Story Problems with Addition and Subtraction)

1. The Suez Canal extends from Port Said to the city of Suez and is 193,120 meters long. If a boat travels 38,620 meters each day for 5 days, how many more meters will it need to travel to reach the end of the canal?

2. Salma was counting ants in colony A. She counted 1,525 ants on Monday, 19,750 ants on Tuesday, and 3,705 ants on Wednesday. If there are 30,520 ants in colony A, how many more ants does she still need to count?

Unit (3)

Lesson 1

(Ant Travel)

Complete:-

- 1) 1 km = m
- 2) 1 m = cm
- 3) 3 m 17 cm = cm
- 4) 19 m 12 cm = cm
- 5) 9 km 14 m = m
- 6) 30 km 65 m = cm
- 7) 340 cm = m + cm
- 8) 720 cm = m + cm
- 9) 6 m = cm
- 10) 20 m 10 cm = cm

(The Weight Can Wait)

Complete:-

1) $4\text{ kg} = \dots\dots\dots \text{ gm}$

2) $9\text{ kg} = \dots\dots\dots \text{ gm}$

3) $10\text{ kg} = \dots\dots\dots \text{ gm}$

4) $8\text{ kg } 50\text{ g} = \dots\dots\dots \text{ gm}$

5) $\dots\dots\dots \text{ kg} = 30,000\text{ gm}$

6) $4,950\text{ kg} = \dots\dots\dots \text{ Kg} + \dots\dots\dots \text{ gm}$

7) $7,600\text{ kg} = \dots\dots\dots \text{ Kg} + \dots\dots\dots \text{ gm}$

8) $18,721\text{ kg} = \dots\dots\dots \text{ Kg} + \dots\dots\dots \text{ gm}$

9) $3,806\text{ g} = \dots\dots\dots \text{ Kg} + \dots\dots\dots \text{ gm}$

Lesson 3

(Fill It Up)

Complete: -

1) 6 liters = MI

2) 9 L = ml

3) 13 L = ml

4) L = 10,000 ml

5) 9,425 ml = L + MI

6) 7,130 ml = L + MI

7) 8L + 819 ml = L

8) 12 L + 1,352 ml = L + ml

9) 13 L – 5,250 ml = L + ml

(Measurements and Unit Conversions)

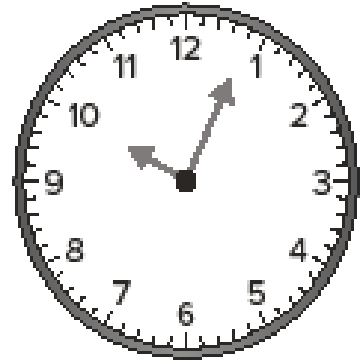
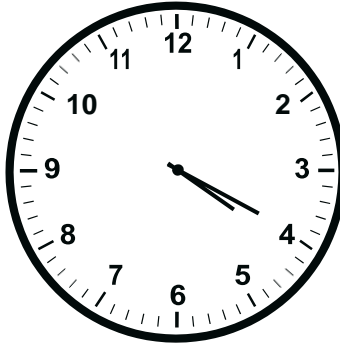
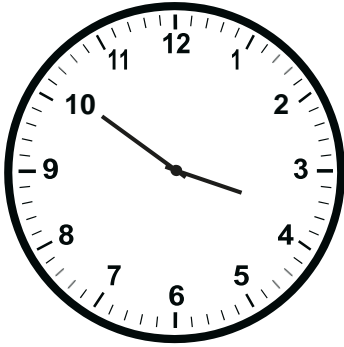
Complete:-

6m	.....	.....	..... mm
8 kg	..... g	.....	.....
3 L	.....	..... cl	.....
5 km	..... m	.....	.....
1,000 m	.....	.....	.....
200 cm	.....	.....	.....
4,000 g	.....	.....	.....
7,000 ml	.....	.....	.....

km	hm	dam	m	dm	cm	mm
kg	hg	dag	g	dg	cg	mg
kL	hL	daL	L	dL	cL	mL

(What time is it?)

Write the time for each clock:-



5 hours 10 minutes = minutes

4 minutes 11 seconds = Seconds

3 days 10 hours = hours

2 weeks 2 days = Days

(How Long Does it Take?)

Solve using two different Strategies.

1. Ant {A} worked from 7.05 am until 8.52 am How long did ant a work?

.....

2. Ant (B) started working at 11.25 am and worked for 82 minute

At what time ant (B) stop working?

.....

3. How Long did Ants (A) and (B) work all together?

.....

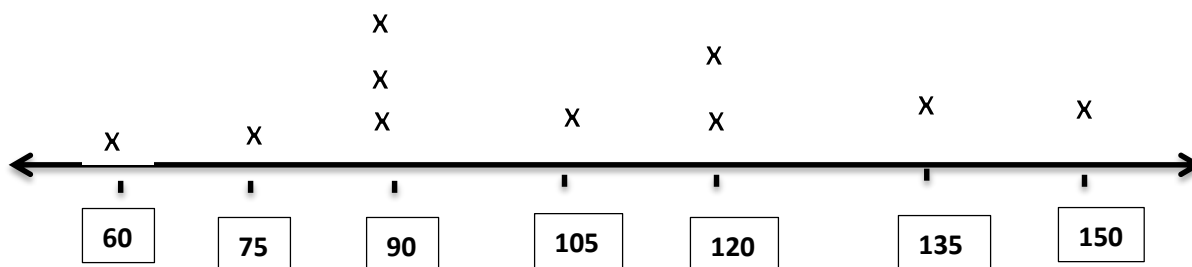
(Scaled measurement)

Point's representation chart

Example:-

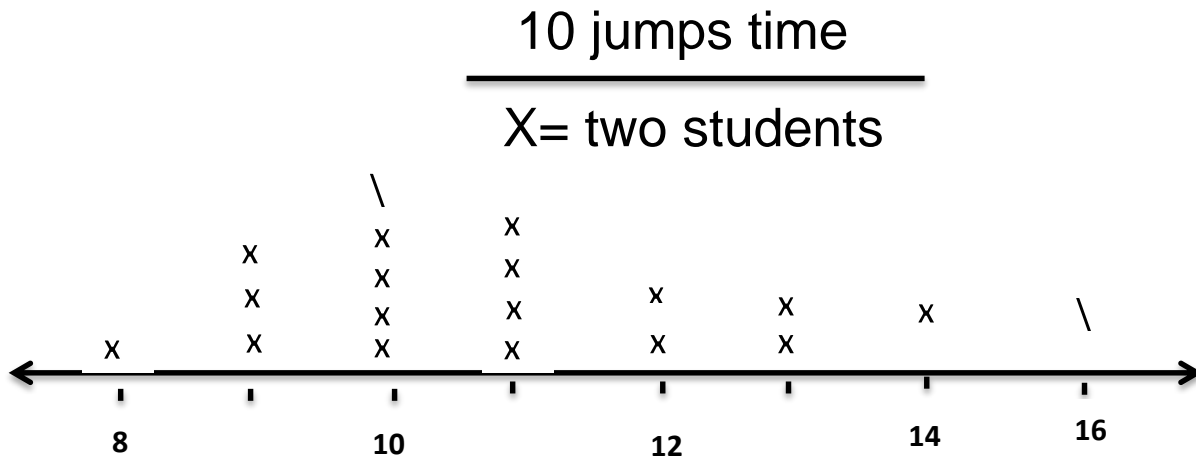
Number of minutes

X= two students



- ❖ What is the scale of the numbers line?
- ❖ What is the least time which students spend it in studying?
- ❖ What is the most time which students spend it in studying?

Example 2:-



What does the symbol X represent?

How many students participated in the jump?

What is the scale of the numbers line?

a) The most number of students at

b) The least number of students at

c) Number of students at 11 is

(Measuring the world around me 1)

Using addition and subtraction to solve measurement problems.

In the colony (A), ants collect 950 grams of food. If the ants consume 25 grams of food on Monday and 37grams of food on Tuesday, How many grams of food are left?



Aya bought potatoes weighing two kilograms and 950 grams and she bought an onion that weighed 1075 grams less than the weight of potatoes. What is the weight of potatoes and onions together?



A fish tank with a capacity of 100 liters and 20000 milliliters of water poured into it. How many liters of water should be used to fill the tank completely?



Rania measures two rows of ants the length of row of ants of the colony (A) is 30 centimeters, and the length of row of ants of the colony (B) is 500 milliliters. How long are the two rows of ants together in centimeters?



Taher's height increased by 10 centimeters in one year. It is now 1 meter 6 centimeters long. How tall is Taher in centimeters 1 year ago?

(Measuring the world around me 2)

Using multiplication and division to solve measurement problems.

Ahmed has a 12 meter long piece of wood that he wants to cut into 3 equal lengths. How long should each piece be in meters? What is the length of each piece in centimeters?



Sarah walked 5,000 meters every day for 9 days.

What is the total number of kilometers she had walked?



Samira studies for the next math test .if Samira was studied for 30 minutes a day. How many hours will you spend studying in 8 days?



An ant can walk up to 5 km per day. If the ant continues to walk for 20 days, how far will it walk in meters?



Ants walk about 5000 meters every day. How many kilometers do ants walk in 6 days?

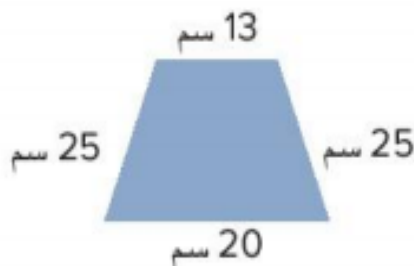
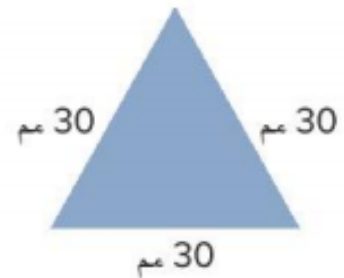
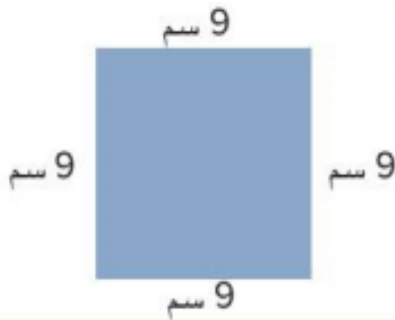
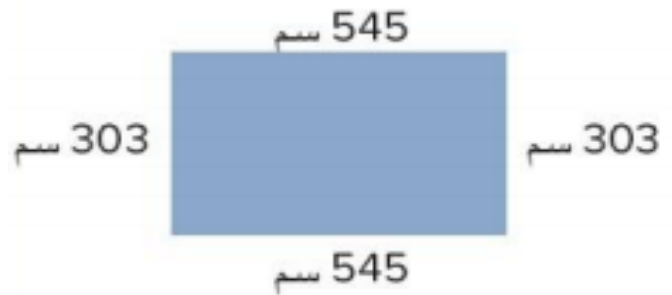
Ahmed is practicing swimming. He spends half an hour every day swimming. What is the total minutes spent by Ahmed swimming in 5 days?

Unit (4)

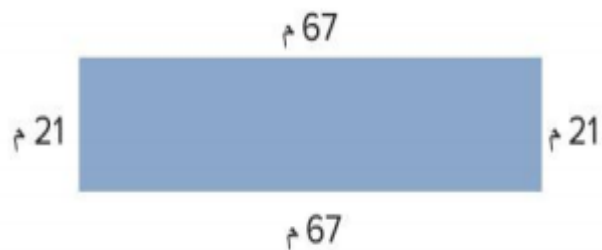
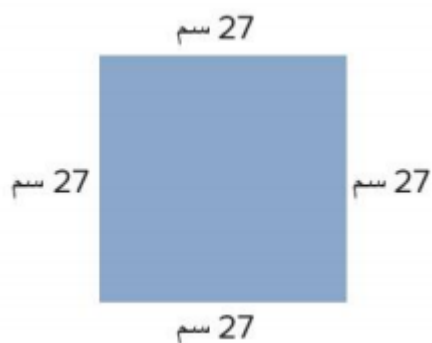
Lesson 1

(Marching Ants)

1) Find the perimeter of the shapes:-



2) by using two rules find the perimeter:-



First rule:

.....

Second rule:

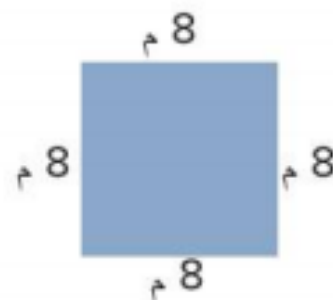
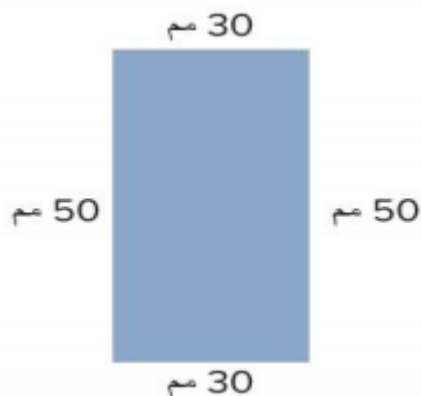
.....

First rule:

.....

Second rule:

.....



First rule:

.....

Second rule:

.....

First rule:

.....

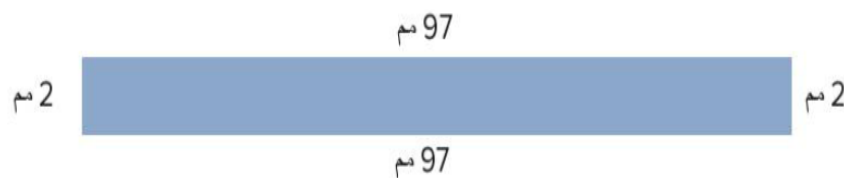
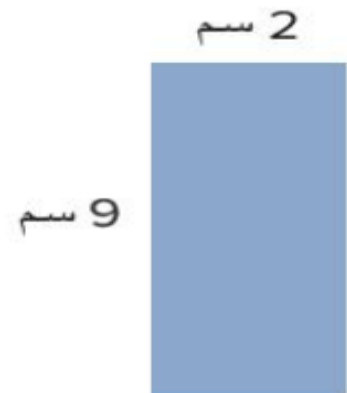
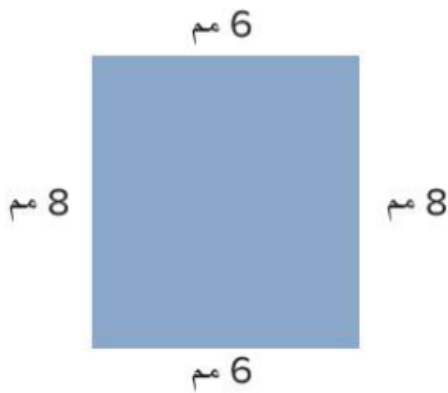
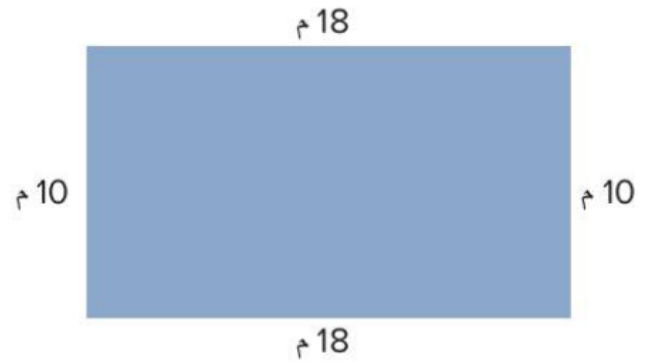
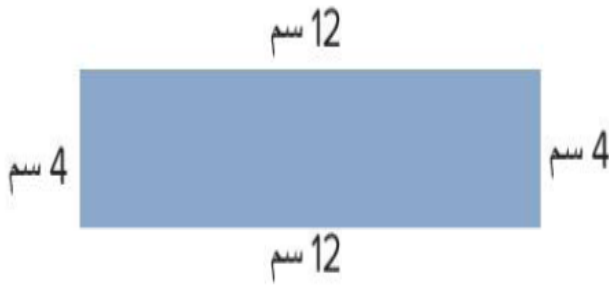
Second rule:

.....

Lesson 2

(Fill the space)

Find the area of the following:-



The length of a rectangle is b . The width is c .

What is the calculation for the area?

Eva needs to calculate the area of her room in order to buy new flooring. The room has the shape of a rectangle with a length of 10 meters and a width of 5 meters. How should Eva calculate the area of the room?

(Something is missing)

Find the missing:-

X units

Perimeter = 26 units

5 units

10 units

area = 50 square unit

X units

15 units

Perimeter = 44 units

X

7 cm

area = 28 cm^2

X

A patio is in the shape of a rectangle. It has an area of 30 square meters. The length of the patio is 6 meters.

What is the width of the patio?

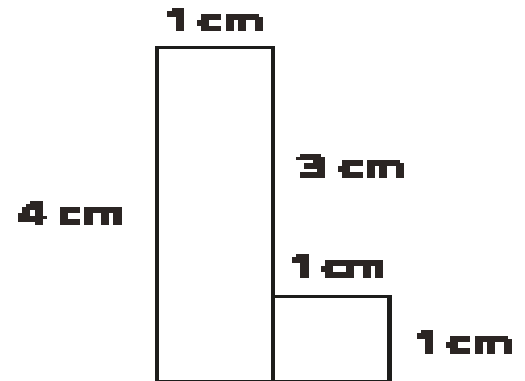
Fatah's rectangular room is 8 meters long and has a perimeter of 24 meters. What is the width of the room?

A rectangle is 10 cm wide and 20 cm long
Find the perimeter?

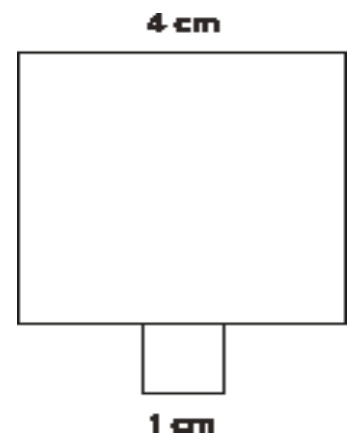
Lesson 4

(Odd Shapes)

What is the perimeter and the area of the figure?



What is the perimeter and the area of the figure?



(Growing Dimensions)

Draw a rectangle with a width of 5 cm and a length 4 times its width then find the perimeter and the area

A rectangular garden is 5 meters wide and 7 meters long.
What is the area of the garden?

Fadil has a rectangular garden that is 5 meters wide and 4 times as long. What is the area of Fadil's garden?

Unit (5)

Lesson 1

(Understanding Multiplicative comparison)

Complete:-

$$6 + 6 + 6 = \dots \times \dots = \dots$$

$$2 + 2 + 2 + 2 + 2 + 2 = \dots \times \dots = \dots$$

$$12 = \dots \text{ times } \dots$$

$$30 = \dots \text{ times } \dots$$

$$24 = \dots \text{ times } \dots$$

$$18 = \dots \text{ times } \dots$$

$$20 = \dots \text{ times } \dots$$

$$49 = \dots \text{ times } \dots$$

$$7 + 7 + 7 = \dots \text{ times } \dots$$

$$9 + 9 + 9 + 9 = \dots \text{ times } \dots$$

$$5 + 5 + 5 + 5 + 5 = \dots \text{ times } \dots$$

(Creating Multiplicative Comparison Equations)

Using multiplication to represent the following equations:-

- 1) A number equals 5 times 6
- 2) 16 equals 8 times a number
- 3) A number equals 2 times 9
- 4) 28 equals 7 times a number
- 5) 40 equals 4 times a number
- 6) 72 equals 9 times a number
- 7) A number equals 5 times 3
- 8) A number equals 4 times 3
- 9) 18 equals 6 times a number
- 10) 25 equals 5 times a number

By using multiplication write the following equations:-

1) Ahmed collected 7 pictures on Monday, and on Thursday he collected 4 times what he collected on Monday.

Write the number of pictures he collected on Thursday.

.....

2) Omar has 10 balls, Hatem has 6 times what Omar has
Write the number of balls with Hatem.

.....

3) Ali ate 5 oranges, and his sister ate 8 times what he ate
Write the number of oranges his sister ate.

.....

4) Heba bought 6 skirts, and Nora bought skirts equal 7 times skirts that Heba bought

Write the number of shirts with Nora.

.....

(Solving Multiplicative Comparison Equations)

Complete:-

7 times = 56

3 times = 24

6 times = 30

4 times = 16

8 times = 48

2 times = 18

..... times 6 = 42

..... times 9 = 54

..... times 4 = 36

..... times 2 = 14

..... times 8 = 72

..... times 1 = 10

5 times 6 =

2 times 8 =

7 times 3 =

Complete:-

What is the number that equals 10 times 9?

Equation: $a = \dots\dots\dots \times \dots\dots\dots$

Answer: $a = \dots\dots\dots$

What is the number that equals 6 times 3?

Equation: $\dots\dots\dots$

Answer: $\dots\dots\dots$

A number times 3 equals 27, what is this number?

Equation: $c \times 3 = 27$

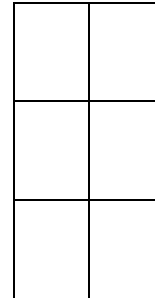
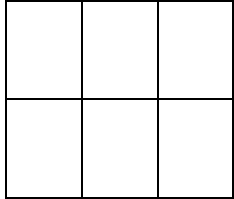
Answer: $c = \dots\dots\dots$

A number times 5 equals 40, what is this number?

Equation: $\dots\dots\dots$

Answer: $\dots\dots\dots$

(Commutative Property of Multiplication)



This array is: 2×3

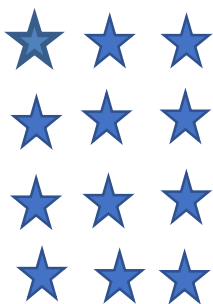
This array is: 3×2

$$2 \times 3 = 3 \times 2 = 6$$

This is called commutative property

Examples:-

Using commutative property for multiplication to show how can we order 12 stars.



This array is: x

This array is: x

So, x = x

Using commutative property for multiplication to complete the following:-

$$7 \times 5 = \dots\dots\dots \times 7$$

$$10 \times 6 = \dots\dots\dots \times 10$$

$$8 \times 3 = 3 \times \dots\dots\dots$$

$$4 \times 9 = 9 \times \dots\dots\dots$$

Using commutative property for multiplication to find the unknown number:-

$$6 \times 8 = a \times 6 \qquad a = \dots\dots\dots$$

$$12 \times 11 = b \times 12 \qquad b = \dots\dots\dots$$

$$c \times 4 = 4 \times 3 \qquad c = \dots\dots\dots$$

$$7 \times d = 10 \times 7 \qquad d = \dots\dots\dots$$

Hamza has 18 books .write equations to show how he can order the books by using commutative property for multiplication.

.....

.....

(Patterns of Multiplying by 10s)

Find the result by using place value strategy:-

- = 5×100
- $2 \times 1,000 = \dots\dots\dots$
- $\times 7 = 700$
- $9 \times \dots\dots\dots = 9,000$
- $4 \times 10,000 = \dots\dots\dots$
- = 6×100
- = 300
- = $8 \times \dots\dots00$
- = $500 \times \dots\dots\dots$
- = $9 \times \dots\dots0$
- = $\times 6000$
- = $5 \times \dots\dots00$
- = $7 \times 100,000$
- = $9 \times 1000,000$
- = $\times 10,0000$

(Exploring Patterns in Multiplication)

Use multiplication strategies you learned to solve the problems:-

- $3 \times 900 =$
- $4 \times 20 =$
- $8 \times 600 =$
- $6 \times 500 =$
- $2 \times 500 =$
- $3 \times 700 =$
- $9 \times 600 =$
- $7 \times 400 =$
- $8 \times 500 =$
- $2 \times 800 =$
- $7 \times 700 =$
- $5 \times 500 =$
- $9 \times 400 =$
- $10 \times 200 =$

(Exploring More Patterns in Multiplication)

Find the result:-

- $(2 \times 3) \times 4 = \dots \times \dots = \dots$
- $(5 \times 2) \times 3 = \dots \times \dots = \dots$
- $(4 \times 3) \times 2 = \dots \times \dots = \dots$
- $(3 \times 2) \times 5 = \dots \times \dots = \dots$
- $(2 \times 4) \times 5 = \dots \times \dots = \dots$
- $(3 \times 3) \times 4 = \dots \times \dots = \dots$
- $(2 \times 4) \times 3 = \dots \times \dots = \dots$
- $(1 \times 10) \times 5 = \dots \times \dots = \dots$

Apply associative property to solve the problems:-

- $2 \times 4 \times 5 = \dots$
- $2 \times 5 \times 3 = \dots$
- $3 \times 2 \times 4 = \dots$
- $3 \times 2 \times 3 = \dots$
- $6 \times 2 \times 3 = \dots$

(Applying patterns in Multiplication)

Complete:-

$$3 \text{ tens} = \dots\dots\dots$$

$$8 \text{ tens} = \dots\dots\dots$$

$$11 \text{ tens} = \dots\dots\dots$$

$$16 \text{ tens} = \dots\dots\dots$$

$$7 \times 20 = \dots\dots\dots$$

$$5 \times 50 = \dots\dots\dots$$

$$4 \times 700 = \dots\dots\dots$$

$$3 \times 4,000 = \dots\dots\dots$$

$$(4 \times 6) \times 3 = \dots\dots\dots \times (6 \times 3)$$

$$6 \times (7 \times 4) = (6 \times \dots\dots\dots) \times 4$$

$$(5 \times 4) \times \dots\dots\dots = 5 \times (\dots\dots\dots \times 9)$$

$$(2 \times \dots\dots\dots) \times 5 = 2 \times (9 \times 5)$$

$$7 \times 3 \times \dots\dots\dots = \dots\dots\dots \times (3 \times 6)$$

$$(9 \times 3) \times 5 = \dots\dots\dots \times (\dots\dots\dots \times \dots\dots\dots)$$

$$(3 \times 2) \times 7 = \dots\dots\dots$$

$$2 \times (5 \times 6) = \dots\dots\dots$$

$$(4 \times 2) \times 9 = \dots\dots\dots$$

$$(5 \times 2) \times 3 = \dots\dots\dots$$

$$8 \times (2 \times 4) = \dots\dots\dots$$

$$7 \times (2 \times 5) = \dots\dots\dots$$

$$(2 \times 3) \times 6 = \dots\dots\dots$$

$$(5 \times 5) \times 4 = \dots\dots\dots$$

Which equation shows how to apply the associative property of multiplication to determine the value of $3 \times (2 \times 100)$?

- a) $5 \times 10 = 50$
- b) $6 \times 10 = 60$
- c) $3 \times 20 = 320$
- d) $3 \times 12 = 36$

Use the associative property of multiplication to solve the equation

$$6 \times (3 \times 100) = \dots\dots\dots$$

Unit (6)

Lesson 1

(Identifying Factors of Whole Number)

Find the factors of the numbers:-

8

10

30

20

16

48

Write the pairs of the factors:-

32

7

81

18

35

Write the factors of the numbers then find the number of them:-

18

14

24

42

Which list includes all factors of 24?

- a) 0 , 1 , 4 , 6 , 24
- b) 24 , 48 , 72 , 96
- c) 2 , 3 , 4 , 6 , 8 , 12
- d) 1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

Which list all factors of 16?

- a) 1 , 16
- b) 2 , 4 , 8
- c) 1 , 2 , 4 , 8 , 16
- d) 1 , 2 , 4 , 6 , 8 , 16

(Prime and Composite Number)

Which is a prime number?

- a) 1
 - b) 7
 - c) 15
 - d) 6
-

Which is a composite number?

- a) 1
 - b) 3
 - c) 15
 - d) 2
-

Which is a prime or composite number?

5 , 13 , 18 , 19 , 22
3 , 9 , 14 , 17 , 20

Underline the number that its factors is 3:-

35 , 132 , 328 , 2,356 , 12,1311

Lesson 3

(Greatest Common Factor)

Write common factors of the following numbers:-

42 , 36

.....

.....

.....

4 , 18

.....

.....

.....

30 , 20

.....

.....

.....

35 , 21

.....

.....

.....

Find the greatest common factor of each two numbers:-



40 , 50

.....

.....

.....

24 , 10

.....

.....

.....

11 , 13

.....

.....

.....

84 , 36

.....

.....

.....

(Identifying Multiples of Whole Number)

By using 120 chart find the multiples of the following numbers:-

2

.....

.....

3

.....

.....

4

.....

.....

5

.....

.....

6



7

8

9

10

Lesson 5

(Common Multiples)

Find the common multiples of the following numbers (only two):-

2 , 5

.....

.....

.....

3 , 4

.....

.....

.....

6 , 2

.....

.....

.....

5 , 4

.....

.....

.....

4 , 8

.....

.....

.....

3 , 5

.....

.....

.....

9 , 1

.....

.....

.....

(Relationships between Factors and Multiples)

Factorize the following numbers:-

- a) 8 , 12 , 36 , 18
- b) 45 , 120 , 160 , 63
- c) 51 , 26 , 77 , 110
-

Write down:-

- a) A number such that 5 is one of its factors.

.....

- b) Two numbers which have 2 and 3 are two factors of them.

.....

- c) Three numbers which have 2 factors only.

.....

- d) A number which has 3 factors only.

.....

Choose the correct answer:-

- a) 2 is a factor of (37 – 519 – 328)
- b) 3 is a factor of (38 – 222 – 59)
- c) 5 is a factor of (721 – 315 – 103)
- d) and are factors of 75 (2 – 3 – 5 – 10)
- e) 6 is a factor of (28 – 18 – 38)
-

numbers	12	8	16	32	15	18	14	3	5
factors									
multiples									

Unit (7)

Lesson 1

(The Area Model Strategy)

Find the result using area of rectangle strategy:-

1) $32 \times 5 = \dots\dots\dots$

--	--

2) $47 \times 6 = \dots\dots\dots$

--	--

3) $37 \times 7 = \dots\dots\dots$

--	--

4) $88 \times 4 = \dots\dots\dots$

5) $231 \times 7 = \dots\dots\dots$

--	--

6) $559 \times 8 = \dots\dots\dots$

7) $192 \times 9 = \dots\dots\dots$

8) $238 \times 2 = \dots\dots\dots$

9) $132 \times 6 = \dots\dots\dots$

--	--	--

(The Distributive Property)

Find the result using distribute:-

1) $34 \times 7 = \dots\dots\dots$

2) $64 \times 6 = \dots\dots\dots$

3) $87 \times 3 = \dots\dots\dots$

4) $13 \times 9 = \dots\dots\dots$

5) $43 \times 9 = \dots\dots\dots$

6) $356 \times 6 = \dots\dots\dots$

7) $543 \times 7 = \dots\dots\dots$

8) $834 \times 3 = \dots\dots\dots$

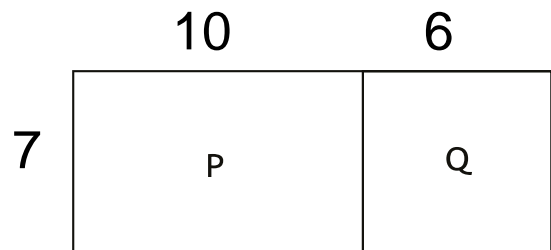
9) $439 \times 8 = \dots\dots\dots$

10) $768 \times 3 = \dots\dots\dots$

(The Partial Products Algorithm)

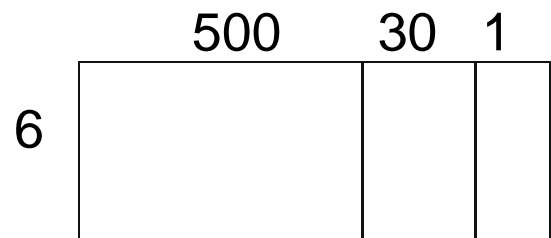
The area model represents 16×7 . What number belongs in rectangle P?

- a) 42
- b) 70
- c) 7
- d) 420



Based on the area model, what is 531×6 ?

- a) 54
- b) 486
- c) 3,186
- d) 30,186



Multiply 417×7 . What are the partial products?

- A. 49, 7, 28
- B. 49, 70, 280
- C. 49, 70, 2,800
- D. 49, 70, 28,000

Which statements correctly represent the product $1,385 \times 4$?
Choose two correct answers.

- A. $1,385 \times 4 = (1,000 \times 4) + (300 \times 4) + (80 \times 4) + (5 \times 4)$
- B. $1,385 \times 4 = 4,000 + 1,200 + 320 + 20$
- C. $1,385 \times 4 = (1,000) + (300) + (80) + (5 \times 4)$
- D. $1,385 \times 4 = 1,000 + 300 + 80 + 20$
- E. $1,385 \times 4 = (13 \times 4) + (85 \times 4)$

Which choice describes a way to use the Distributive Property of Multiplication to find the product of

$$1,252 \times 8?$$

A) Write 1,252 as $1,000 + 200 + 50 + 2$.

Multiply 1,000, 200, 50, and 2 by 8.

Add the products.

B) Write 1,252 as $120 + 50 + 2$.

Multiply 120, 50, and 2 by 8.

Add the products.

C) Write 1,252 as $125 + 2$.

Multiply 125 and 2 by 8.

Add the products.

D) Write 1,252 as $12 + 52$.

Multiply 12 and 52 by 8.

Add the products.

(The Standard Multiplication Algorithm)

Which best estimates the product?

- A. To estimate 412×3 , use $500 \times 3 = 1,500$.
 - B. To estimate 412×3 , use $400 \times 10 = 4,000$.
 - C. To estimate 892×2 , use $800 \times 2 = 1,600$.
 - D. To estimate 892×2 , use $900 \times 2 = 1,800$.
-

Use the standard algorithm to multiply 642×2 . What is the product?

- A. 2,184
- B. 284
- C. 1,284
- D. 12,804

(Connecting Strategies)

Use the standard algorithm:-

$$7 \times 30 = \dots\dots\dots$$

$$8 \times 400 = \dots\dots\dots$$

$$3 \times 27 = \dots\dots\dots$$

$$204 \times 2 = \dots\dots\dots$$

$$2,213 \times 4 = \dots\dots\dots$$

$$1,390 \times 2 = \dots\dots\dots$$

$$735 \times 5 = \dots\dots\dots$$

$$74 \times 2 = \dots\dots\dots$$

$$122 \times 4 = \dots\dots\dots$$

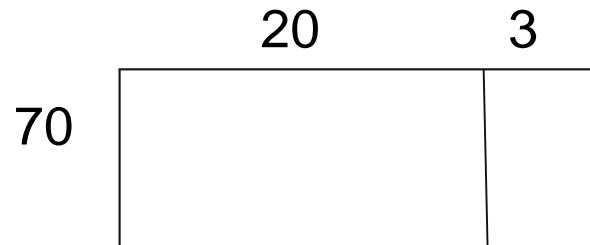
$$472 \times 5 = \dots\dots\dots$$

$$383 \times 2 = \dots\dots\dots$$

$$1,074 \times 3 = \dots\dots\dots$$

(Two-Digit Multiplication)

Use the area model to multiply 23×70 .



- A. $1,400 + 210 = 1,610$
- B. $140 + 210 = 350$
- C. $14,000 + 210 = 14,210$
- D. $70 + 20 + 3 = 93$

Rishabh found the area of a rectangle by multiplying 27 and 70. What is the best way for Rishabh to estimate if his answer is reasonable?

- A. Multiply 30×70
- B. Multiply 20×70
- C. Multiply 30×100
- D. Multiply 20×100

(Area Models and 2-Digit Multiplication)

What is the correct way to use the area model to multiply 54×27 ?

	50	4
20		
7		

- A. $10,000 + 350 + 80 + 28 = 10,458$
- B. $1,000 + 350 + 80 + 28 = 1,458$
- C. $7 + 20 + 50 + 4 = 81$
- D. $1,000 + 350 + 80 = 1,430$

What is the correct way to multiply 67×13 using partial products?

- A. $21 + 180 + 70 + 600 = 871$
- B. $21 + 180 + 70 + 60 = 331$
- C. $21 + 18 + 70 + 600 = 709$
- D. $70 + 10 + 63 + 17 = 160$

(Algorithms and 2-Digit Multiplication)

What is the missing value in area model that represents 19×15 ?

	10	5
10	100	50
9	90	?

Which partial products model represents this multiplication problem?

- A. $(4 \times 4) + (4 \times 10) + (40 \times 4) + (30 \times 10)$
- B. $(4 + 4) + (4 + 10) + (30 + 4) + (30 + 10)$
- C. $(4 \times 4) + (4 \times 30) + (10 \times 4) + (10 \times 30)$
- D. $(4 + 4) \times (4 + 30) \times (10 + 4) \times (10 + 30)$

(Putting It All Together)

Ada made 8 bracelets. There are 13 beads on each bracelet. How many beads are there on all 8 bracelets?

- A. 84
 - B. 94
 - C. 104
 - D. 122
-

Youssef reads 27 pages every night for a week. Aya reads 62 pages every night for a week. How many pages do they read in all?

(Exploring Remainders)

Find:-

1) $630 \div 3 = \dots\dots\dots$

2) $844 \div 4 = \dots\dots\dots$

3) $630 \div 7 = \dots\dots\dots$

4) $32,000 \div 8 = \dots\dots\dots$

5) $45,000 \div 9 = \dots\dots\dots$

6) $3,600 \div 6 = \dots\dots\dots$

7) $240 \div 3 = \dots\dots\dots$

(Patterns and Place Value in Division)

Mona has 220 pages of a book to read for class.

She needs to finish the book in 7 days .She wants to read an equal number of pages each day.

Can she do that?

- A) Yes, she can read 31 pages each day.
- B) No, she will have to read 3 fewer pages on one of the days
- C) No, she will have to read 3 additional pages on one of the days.
- D) Yes, she can read 34 pages each day.

(The Area Model and Division)

Which is the quotient, divisor, and dividend in the equation $91 \div 7 = 13$?

91	7	13
----	---	----

The quotient is

The divisor is

The dividend is

What is the unknown value?

$$70 \div 7 = 10$$

$$700 \div 7 = 100$$

$$7,000 \div 7 = ?$$

A. 700

B. 1,000

C. 7,000

D. 100

Auset has 270 pieces of ribbon. She wants to give an equal number of them to 8 of her friends. How many pieces of ribbon will each friend receive and how many will be left over?

a) Each friend will receive 32 pieces. There will be 14 pieces left over.

b) Each friend will receive 34 pieces. There will be 2 pieces left over.

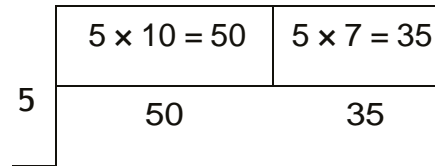
c) Each friend will receive 33 pieces. There will be 6 pieces left over.

d) Each friend will receive 33 pieces. There will be 0 pieces left over.

(The Partial Quotients Algorithm)

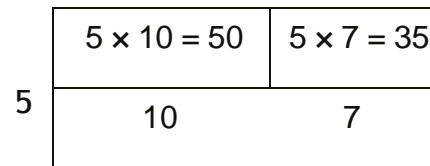
Which area model represents $87 \div 5$?

A.



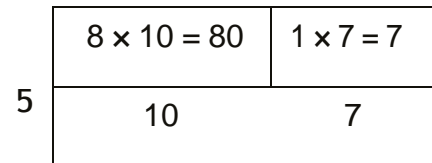
R2

B.

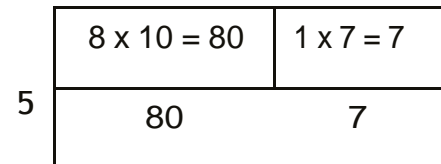


R2

C.



D.



Afra divides $617 \div 5$ using the partial quotients algorithm.
She uses 100 as the quotient on the first step.

What is her next step?

- A. Multiply 100 by 617 and subtract it from 5.
- B. Multiply 100 by 617 and add it to 5.
- C. Multiply 100 by 5 and subtract it from 617.
- D. Multiply 100 by 5 and add it to 617.

(The Standard Division Algorithm)

Which choice shows the *best* way to estimate $8,271 \div 4$?

a) Round 8,271 to 10,000 and round 4 to 10.

Then $10,000 \div 10 = 1,000$.

b) Round 8,271 to 8,000 and round 4 to 10.

Then $8,000 \div 10 = 800$.

c) Round 8,271 to 8,000. Then $8,000 \div 4 = 2,000$.

d) Round 8,271 to 10,000. Then $10,000 \div 4 = 2,500$.

Divide:- $76 \div 2$ using the standard algorithm.

$7 \div 2$
$2 \div 7$
$2 \div 76$
$76 \div 2$

$2 \div 3$
$2 \div 6$
$16 \div 2$
$70 \div 2$

3
6
34
38

The first division is

The next division is

$76 \div 2 = \dots\dots\dots$

Aaran has 30 crackers. He wants to give the same number of crackers to 3 friends.

How many crackers will each friend get?

- A. 10 crackers
- B. 3 crackers
- C. 5 crackers
- D. 1 cracker

(Division and multiplication)

Determine when to add, subtract, multiply, or divide

1) $23 \times 7 = \dots\dots\dots$

2) $583 \div 6 = \dots\dots\dots$

3) $62 \times 18 = \dots\dots\dots$

4) $6 \times 127 = \dots\dots\dots$

Over the course of 20 weeks, Sarah collected 14 kilograms of metal cans for recycling. Selim collected 6 times what Sarah collected. The cans must be put in bags to take them to the recycling center, each bag holds 7 kilograms of cans. How many bags will Selim need to play?

(Solving challenging story problems)

1) $534 \div 6 = \dots\dots\dots$

2) $725 \div 8 = \dots\dots\dots$

3) Hadi owns 347 small glass balls, Kamal has 4 times as much as Hadi, Hala has the least of Kamal's by 977 pieces. How many glass balls does Aura have?

4) Yahya placed 21 bottles of paint evenly on tables. How many bottles of paint did he put on each table?

Lesson 1

(Problem-Solving Strategies)

Use strategies to solve problems on addition, subtraction, multiplication and division.

Solve:-

1) $349 + 199 = \dots\dots\dots$

2) $9230 - 455 = \dots\dots\dots$

3) $62 \times 18 = \dots\dots\dots$

4) $678 \div 6 = \dots\dots\dots$

5) $5612 - 56 = \dots\dots\dots$

6) $3267 + 1892 = \dots\dots\dots$

7) $6 \times 127 = \dots\dots\dots$

8) $9284 + 371 = \dots\dots\dots$

9) $1789 + 472 = \dots\dots\dots$

10) $5 \times 472 = \dots\dots\dots$

11) $725 \div 8 = \dots\dots\dots$

12) $8572 - 188 = \dots\dots\dots$

13) $8573 + 326 = \dots\dots\dots$

14) $782 \times 7 = \dots\dots\dots$

15) $9747 - 5321 = \dots\dots\dots$

16) $234 \times 6 = \dots\dots\dots$

17) $5874 + 854 = \dots\dots\dots$

(Which Comes First?)

Solve the following:-

$$\text{Purple Trapezoid} + \text{Purple Trapezoid} + \text{Purple Trapezoid} = 27$$

$$\text{Yellow Pentagon} + \text{Purple Trapezoid} \times \text{Yellow Pentagon} = 80$$

$$\text{Yellow Pentagon} + \text{Yellow Pentagon} \times \text{Purple Ring} = 48$$

$$2 \times \text{Yellow Pentagon} + \text{Purple Ring} \times 2 \times \text{Purple Trapezoid} = \underline{\hspace{2cm}}$$

$$\text{Purple Rectangle} + \text{Purple Rectangle} + \text{Purple Rectangle} = 12$$

$$\text{Purple Rectangle} + \text{Purple Rectangle} + \text{Grey Triangle} = 18$$

$$\text{Orange Circle} + \text{Grey Triangle} + \text{Grey Triangle} = 26$$

$$\text{Grey Triangle} + \text{Orange Circle} \times \text{Purple Rectangle} = \underline{\hspace{2cm}}$$

Solve the following:-

1) $6 \times 2 + 13 = \dots\dots\dots$

2) $5 \times 7 - 12 = \dots\dots\dots$

3) $300 - 80 \times 2 = \dots\dots\dots$

4) $6 + 10 \div 2 = \dots\dots\dots$

5) $30 \div 5 + 2 = \dots\dots\dots$

6) $10 - 6 \div 2 = \dots\dots\dots$

7) $20 \div 4 - 1 = \dots\dots\dots$

8) $1 - 1000 \div 1000 = \dots\dots\dots$

(Order of Operations)

Solve the following:-

1) $20 \div 5 + 2 + 3 = \dots\dots\dots$

2) $16 - 7 + 2 + 5 = \dots\dots\dots$

3) $6 \times 3 - 4 + 3 = \dots\dots\dots$

4) $25 + 42 \div 7 - 3 = \dots\dots\dots$

5) $32 - 2 \times 5 + 4 = \dots\dots\dots$

6) $88 - 10 \times 8 + 6 = \dots\dots\dots$

7) $12 - 72 \div 12 + 9 = \dots\dots\dots$

8) $70 \div 7 + 1 - 7 = \dots\dots\dots$

(The Order of Operations and Story Problems)

Solve the following:-

1) $89 + 2 - 4 \times 3 = \dots\dots\dots$

2) $28 \div 4 + 7 = \dots\dots\dots$

3) Amr walked 14 kilometers in two weeks. The next week, he walked 54 km. How many kilometers did he walk during those weeks?

4) There are 194 people in his party. 43 people left in cars. The rest of the people want to go home using a microbus. If the load of each microbus 9 people. How many minibuses are needed to get everyone home?