

MATH

คณิตศาสตร์ EP U.5 | **SUCCESS**

คณิตศาสตร์
EP U.5

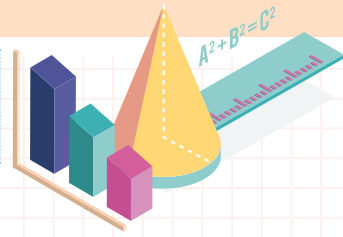
Practice Mathematics workbook for English Program (EP) students
แบบฝึกหัดวิชาคณิตศาสตร์ ฉบับภาษาอังกฤษ สำหรับนักเรียนห้องเรียนภาษาอังกฤษ (EP)

: Fun practice everyday, to build basis and develop perfect Mathematics skills.

GRADE **5**



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Content

CHAPTER 1 Addition, Subtraction, Multiplication and Division of numeral numbers

Addition of numeral numbers	1
Exercise 1	2
Exercise 2	2
Exercise 3	4
Subtraction of numeral numbers	5
Exercise 4	6
Exercise 5	7
Exercise 6	9
Multiplication of numeral numbers	10
Exercise 7	11
Exercise 8	12
Exercise 9	14
Division of numeral numbers	15
Exercise 10	16
Exercise 11	18
Exercise 12	21
Mixed Operations	22
Exercise 13	23
Exercise 14	26

CHAPTER 2 Fraction

Equivalent fractions	27
Exercise 15	28
Exercise 16	29
Fractions comparison	30
Exercise 17	31

Exercise 18.....	32
Exercise 19.....	32
Exercise 20.....	34
Exercise 21.....	35
Fractions equal to number	36
Exercise 22.....	37
Exercise 23.....	38
Proper fractions	39
Exercise 24.....	40
Improper fractions.....	41
Exercise 25.....	42
Exercise 26.....	44
Mixed number.....	45
Exercise 27.....	46
The relationship between mixed number and improper fraction.....	48
Exercise 28.....	50
Exercise 29.....	51

CHAPTER 3 Addition, Subtraction, Multiplication and Division of fractions

Addition and Subtraction of fractions which same denominator	52
Exercise 30.....	53
Exercise 31.....	54
Addition and Subtraction of fractions which different denominator.....	55
Exercise 32.....	56
Exercise 33.....	58
Analysis word problems and find the answer.....	59
Exercise 34.....	60
Multiply the fraction by the number	65
Exercise 35.....	66
Exercise 36.....	68
Multiply the fraction by the fraction	69
Exercise 37.....	70
Exercise 38.....	72

Word problems of multiplying fraction	73
Exercise 39.....	74
Reciprocal of fractions.....	79
Exercise 40.....	80
Division of fractions	81
Exercise 41.....	82
Exercise 42.....	84
Word problems of dividing fraction	85
Exercise 43.....	86
Addition, Subtraction and Multiplication of fractions.....	91
Exercise 44.....	92
Form of number.....	94
Exercise 45.....	95
Exercise 46.....	96

CHAPTER 4 Angles

Name of symbol of angles.....	97
Exercise 47.....	99
Exercise 48.....	101
Type of angles	102
Exercise 49.....	103
Exercise 50.....	105
Exercise 51.....	106
Measure angles with a protractor	107
Exercise 52.....	108
Exercise 53.....	112
Exercise 54.....	114

CHAPTER 5 Parallels line

Parallels line.....	115
Exercise 55.....	116
Exercise 56.....	118
Exercise 57.....	119
Exercise 58.....	120

Construct Parallels line through the given point	121
Exercise 59.....	123
Exercise 60.....	125
Exercise 61.....	126

CHAPTER 6 Quadrilaterals

Right-angled quadrilateral.....	130
Exercise 62.....	131
Type of quadrilaterals	133
Exercise 63.....	134
Exercise 64.....	135
Creating right-angled quadrilaterals.....	136
Exercise 65.....	137
Exercise 66.....	139
Area of right-angled quadrilaterals.....	141
Exercise 67.....	143
Finding the area of right-angled quadrilaterals by using formula	146
Exercise 68.....	148
Exercise 69.....	150
Exercise 70.....	154

CHAPTER 7 Decimal

1-Decimal place	155
Exercise 71.....	156
Exercise 72.....	158
Exercise 73.....	159
Exercise 74.....	161
Exercise 75.....	163
Exercise 76.....	163
2-Decimal place which more than 1	164
Exercise 77.....	165
Exercise 78.....	169
Exercise 79.....	169

Decimal and numeral.....	170
Exercise 80.....	171
Exercise 81.....	172
Places, place values and value of the digit of decimals.....	173
Exercise 82.....	174
Exercise 83.....	175
Exercise 84.....	175
Exercise 85.....	176
Writing decimal which not over 2-decimal place in expanded form	177
Exercise 86.....	178
Exercise 87.....	178
Exercise 88.....	179
Comparing decimal which not over 2-decimal place	180
Exercise 89.....	181
Exercise 90.....	182
Exercise 91.....	182
Decimal into the fraction form.....	183
Exercise 92.....	184
Fraction into the decimal form	185
Exercise 93.....	186
Exercise 94.....	186
Exercise 95.....	188
Decimal word problems	189
Exercise 96.....	189
Exercise 97.....	190

CHAPTER 8 Addition, Subtraction and Multiplication of decimal

Addition of decimal which not over 2-decimal place.....	192
Exercise 98.....	193
Exercise 99.....	195
Addition of 3-decimal numbers	196
Exercise 100	197
Exercise 101	199

Subtraction of decimal which not over 2-decimal place	200
Exercise 102	201
Exercise 103	203
Multiplication of decimal which not over 2-decimal place.....	204
Exercise 104	205
Exercise 105	207
Multiplication word problems	208
Exercise 106	209
Mixed operation of decimal.....	213
Exercise 107	214
Exercise 108	217

CHAPTER 9 Circle

Parts of circle	218
Exercise 109	220
Exercise 110	223
Exercise 111	225
Exercise 112	227
Creating the circle.....	229
Exercise 113	230

CHAPTER 10 Three-dimensional geometry and Volume of rectangle

Sphere, cylinder and cone.....	237
Exercise 114	238
Prism	240
Pyramid	241
Exercise 115	242
Finding the volume	244
Exercise 116	245
Volume of rectangle	248
Exercise 117	249
Finding the volume (or capacity) of cuboid by using formula.....	252

Exercise 118	253
Exercise 119	257

CHAPTER 11 Application 260

Multiplication, Division of fraction	260
Exercise 120	261
Solving word problems by using rule of three.....	263
Exercise 121	264
Fraction and Percentage.....	268
Exercise 122	269
Exercise 123	270
Exercise 124	271
Decimal and Percentage.....	272
Exercise 125	273
Exercise 126	274
Percentage word problems	275
Discounting.....	275
Exercise 127	276
Exercise 128	280
Profit and Loss	284
Exercise 129	286
Exercise 130	287
Exercise 131	288
Exercise 132	289
Finding percentage	293
Exercise 133	294

CHAPTER 12 Statistics and Probability

Data collection and analysis	299
Exercise 134	300
Exercise 135	301
Exercise 136	302
Exercise 137	304

Bar graph	306
Exercise 138	307
Exercise 139	308
Exercise 140	309
Exercise 141	310
A broken axis graph	311
Exercise 142	312
Exercise 143	314
Exercise 144	316
Exercise 145	317
Bar graph comparing	318
Exercise 146	319
Exercise 147	321
Exercise 148	323
Prediction.....	324
Exercise 149	326
Exercise 150	327

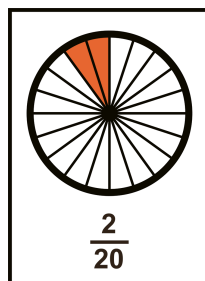
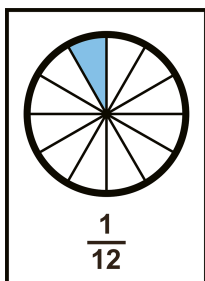
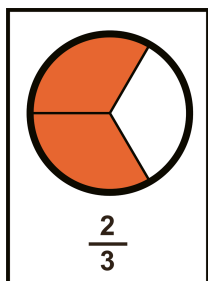
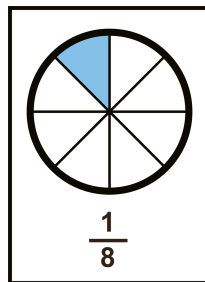
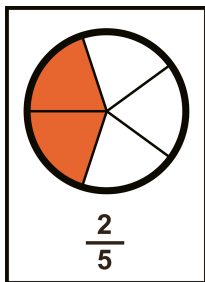
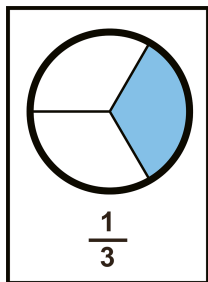
EXAMINATION

Chapter 1 Addition, Subtraction, Multiplication and Division of numeral numbers.....	329
Chapter 2 Fraction	331
Chapter 3 Addition, Subtraction, Multiplication and Division of fractions.....	334
Chapter 4 Angles	337
Chapter 5 Parallels line.....	340
Chapter 6 Quadrilaterals	345
Chapter 7 Decimal	349
Chapter 8 Addition, Subtraction and Multiplication of decimal.....	351
Chapter 9 Circle.....	353
Chapter 10 Three-dimensional geometry and Volume of rectangle.....	357
Chapter 11 Application	361
Chapter 12 Statistics and Probability	364

Proper fractions

Proper fraction is the fraction that greater than 0 but less than 1. The numerator is less than the denominator.

เศษส่วนแท้ คือ เศษส่วนที่มีค่ามากกว่า 0 แต่น้อยกว่า 1 โดยตัวเศษมีค่าน้อยกว่าตัวส่วน



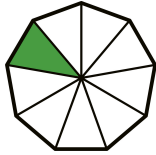


Exercise 24

SCORE

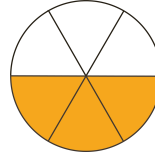
Write the proper fraction from the given pie model.

1.



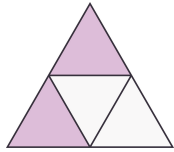
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2.



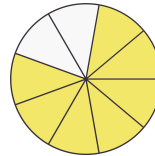
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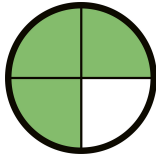
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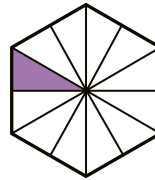
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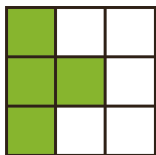
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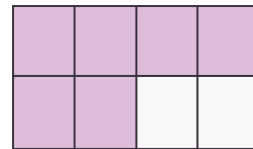
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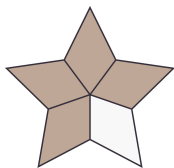
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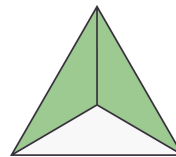
Answer: _____

9.



Answer: _____

10.



Answer: _____

Analysis word problems and find the answer

To solve the word problems, we have the steps to do. They will help you solve it easily.



Example

There are $\frac{1}{5}$ liter of water in the bucket. She pours $\frac{2}{5}$ liter of water in the same bucket. How many liters of water are there in the bucket?

The first thing that you have to do is analyzing. you have to find what they give and what they want.

From the example:

What they give \longrightarrow There are $\frac{1}{5}$ liter of water in the bucket.

(โจทย์ให้อะไรมา) She pours $\frac{2}{5}$ liter of water in the same bucket.

What they want \longrightarrow How many liters of water are there in the bucket?

(โจทย์ต้องการอะไร)

The second is planning. You have to plan the way to find the answer.

From the example:

We have to combine the liter of water together. So, we have to do the addition.

The third is writing the mathematical sentence.

From the example:

$$\frac{1}{5} + \frac{2}{5} = \square$$

The fourth is solving the problem.

From the example:

There are $\frac{1}{5}$ liter of water in the bucket.

She pours $\frac{2}{5}$ liter of water in the same bucket.

There are $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$ liter of water in the bucket.

Answer There are $\frac{3}{5}$ liter of water in the bucket.

Here are the steps to solve the word problems:

1. Find what they give. (หาว่าโจทย์ให้อะไรมา)
2. Find what they want. (หาว่าโจทย์ต้องการอะไร)
3. Plan the way to find the answer. (เลือกวิธีการหาคำตอบ)
4. Write the mathematical sentence. (เขียนประโยคสัญลักษณ์)
5. Solve the problem. (แก้โจทย์ปัญหา)



Exercise 34

SCORE

Write the mathematical sentence, show the solution and check the answer.

1. Fern uses $\frac{3}{10}$ kilogram of sugar to bake the cake and $\frac{4}{10}$ kilogram of sugar to bake the cookies.
How many kilograms of sugar does she use?

Mathematical sentence: _____

Answer: _____

2. A teacher buys $\frac{8}{15}$ meter of red ribbon and $\frac{3}{5}$ meter of pink ribbon. How many meters of ribbon does she buy?

Mathematical sentence: _____

Answer: _____

Multiply the fraction by the fraction

To multiply the fraction by the fraction, we will multiply the numerators together and also multiply the denominator together. Sometimes, we need to simplify or reduce the answer to make it simple.

การคูณเศษส่วนด้วยเศษส่วน สามารถทำได้โดยการคูณตัวเศษเข้าด้วยกัน และคูณตัวส่วนเข้าด้วยกัน



Example

$$\frac{1}{2} \times \frac{3}{4} = \square$$

$$\begin{aligned} \frac{1}{2} \times \frac{3}{4} &= \frac{1 \times 3}{2 \times 4} \\ &= \frac{3}{8} \end{aligned}$$

$$\text{So, } \frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$$



Example

$$\frac{2}{5} \times \frac{4}{6} = \square$$

$$\begin{aligned} \frac{2}{5} \times \frac{4}{6} &= \frac{2 \times 4}{5 \times 6} = \frac{8}{30} \\ &= \frac{4}{15} \end{aligned}$$

we can divide the numerator and denominator by the same number. From the example, we divide 2 and 6 by 2. So, we can to do another calculation.

$$\begin{aligned} \frac{\cancel{2}^1}{5} \times \frac{4}{\cancel{6}_3} &= \frac{1 \times 4}{5 \times 3} \\ &= \frac{4}{15} \end{aligned}$$

$$\text{So, } \frac{2}{5} \times \frac{4}{6} = \frac{4}{15}$$

Notice

We cannot divide both numerators or both denominators.

$$\frac{\cancel{2}^1}{5} \times \frac{\cancel{4}^2}{\cancel{6}^2} \text{ It is wrong. We cannot divide both numerators.}$$

แบบนี้ไม่ถูกต้อง เราไม่สามารถหารตัวเศษเข้าด้วยกันได้



Exercise 37

SCORE

Show the solution and fill the answer.

1. $\frac{5}{8} \times \frac{4}{7} =$ _____

2. $\frac{9}{14} \times \frac{5}{8} =$ _____

3. $\frac{6}{21} \times \frac{2}{3} =$ _____

4. $\frac{12}{15} \times \frac{9}{11} =$ _____

5. $\frac{18}{20} \times \frac{6}{15} =$ _____

6. $\frac{21}{25} \times \frac{9}{10} =$ _____

7. $\frac{4}{18} \times \frac{6}{4} =$ _____

8. $\frac{12}{10} \times \frac{30}{2} =$ _____



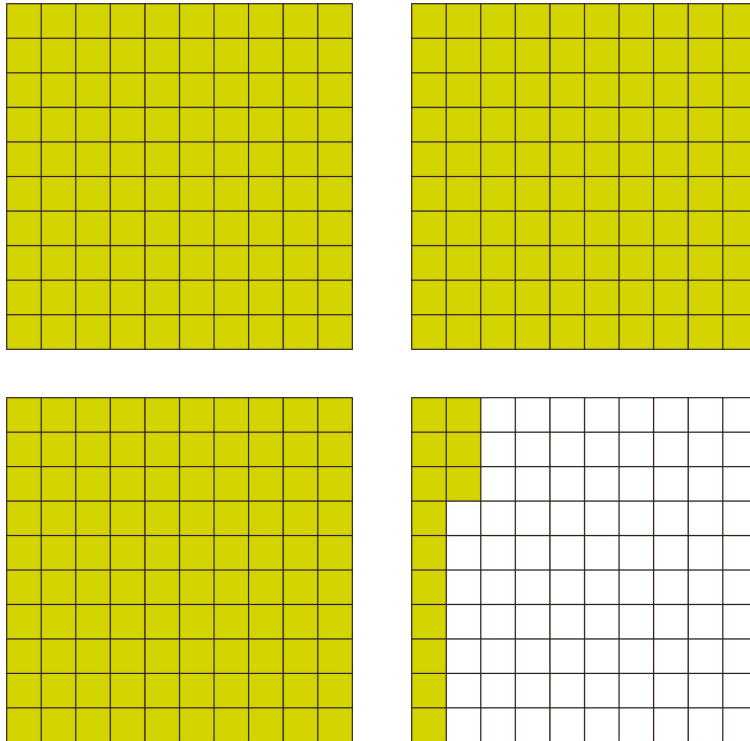
2-Decimal place which more than 1

2-decimal place has only two number after the point as 1.58, 2.34, 3.67. It can show in the figures of hundred. One hundred tiles shaded shows as 1 and If there is some shade of figure, it shows the decimal.

To write the word form of the decimal, we use the word “and” for the decimal point and also end with place value of the ending decimal.

ทศนิยม 2 ตำแหน่งจะมีเลขหลังจุดเพียง 2 เลข เช่น 1.58, 2.34, 3.67 ซึ่งแสดงในรูปส่วนร้อย การแรเงา 100 ช่องจะมีค่าเท่ากับ 1 และถ้าแรเงาบางส่วนจะแสดงในรูปแบบของทศนิยม

การเขียนคำอ่านของทศนิยม เราจะอ่านค่าของจำนวนโดยเริ่มจากด้านซ้ายของจุดทศนิยมตามปกติ แล้วหลังจากนั้นเราจะอ่านว่า “จุด” เมื่อถึงสัญลักษณ์ (.) แล้วอ่านไปทางขวาจนจบ โดยเลขหลังจากผ่านจุดไปแล้วจะไม่อ่านด้วยค่าประจำหลักของจำนวนนั้น เราจะอ่านเฉพาะตัวเลขเท่านั้น



There are 3 shaded figures and 13 shaded tiles of 100. (มีการแรเงา 3 รูป และ 13 ช่องจาก 100 ช่อง)

So, we can write as

decimal form: 3.13

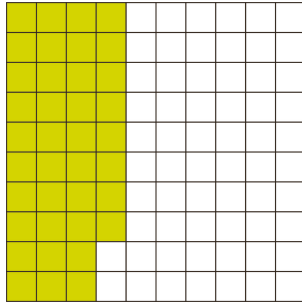
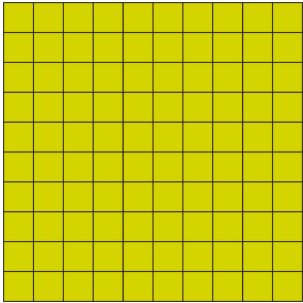
word form: three and thirteen hundredths

Exercise 77

SCORE

Write the decimal form and word form from the given figure.

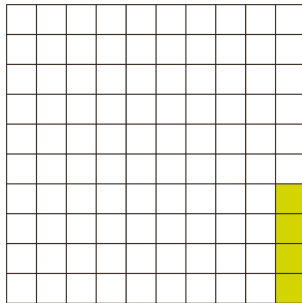
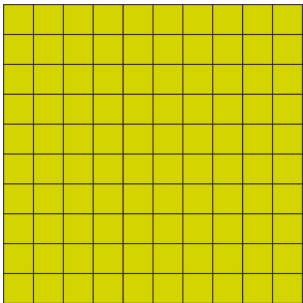
1.



decimal form: _____

word form: _____

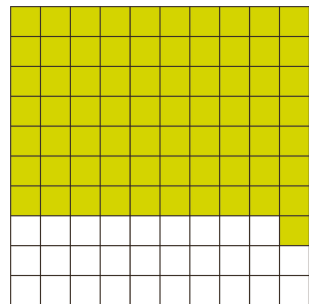
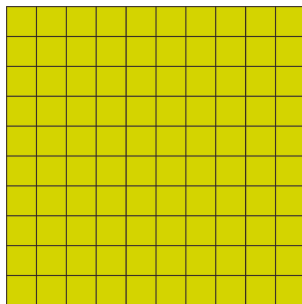
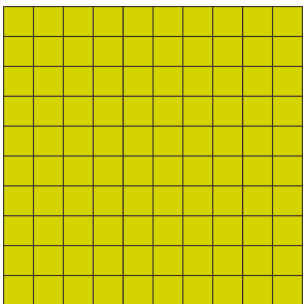
2.



decimal form: _____

word form: _____

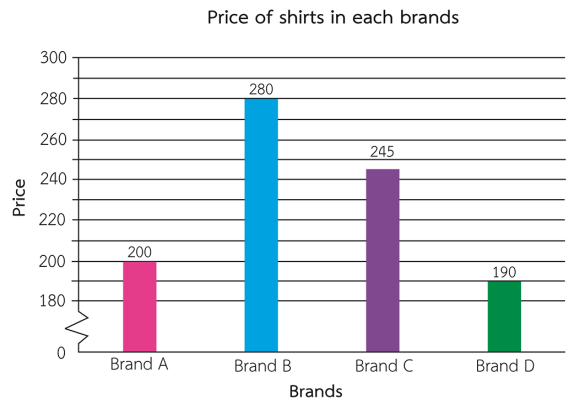
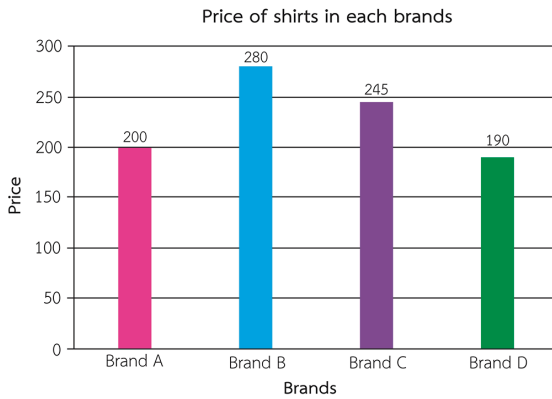
3.



decimal form: _____

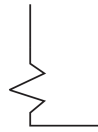
word form: _____

A broken axis graph



A broken axis graph is a part of x or y axis which omitted to save space. The broken axis graph has a zigzag line at the location where the scale is broken.

แผนภูมิแท่งที่มีการย่อระยะ คือ ส่วนของแกน x หรือ y มีการละเว้นค่าจำนวนเพื่อประหยัดพื้นที่ โดยแผนภูมิแท่งที่มีการย่อระยะจะใช้เส้นหยักในบริเวณที่ต้องการละเว้น



Broken scale graph is useful for the graph where the numbers near zero are not need. As the example above, the number under 190 is not necessary. So, we cut the unnecessary number out and zoom in on the important data by using a broken axis.

แผนภูมิแท่งที่มีการย่อระยะมีประโยชน์อย่างมาก เมื่อเส้นแสดงจำนวนที่อยู่ใกล้ 0 ไม่ได้ใช้งาน อย่างเช่น แผนภูมิตัวอย่างด้านบน จำนวนก่อนถึง 190 ไม่ได้ใช้งาน เราจึงทำการตัดส่วนที่ไม่จำเป็นออก และสามารถขยายข้อมูลส่วนสำคัญขึ้นมาให้ชัดเจนขึ้นได้ โดยใช้การย่อระยะ

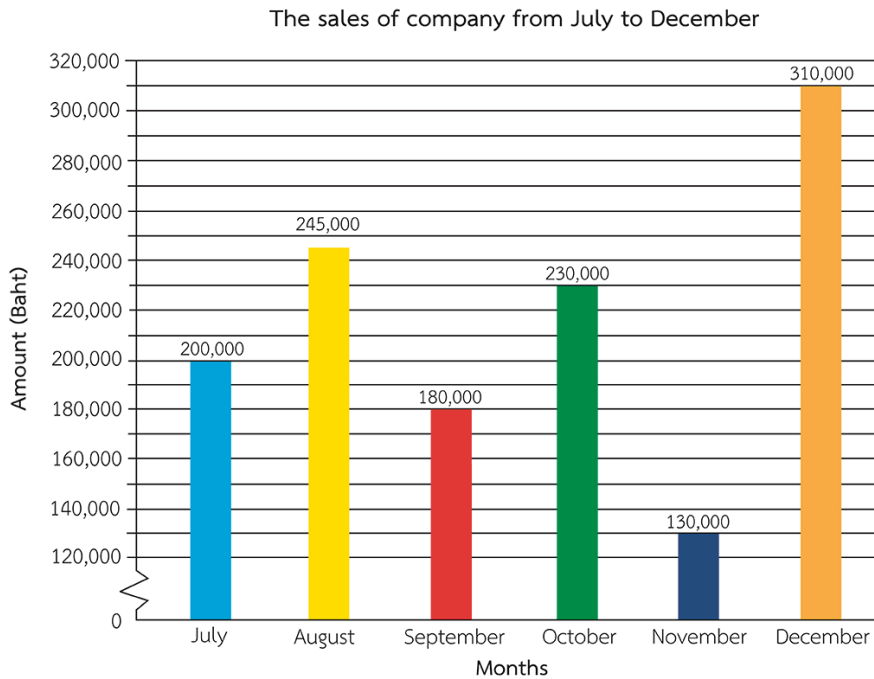


Exercise 142

SCORE

Answer the question by given bar graph.

The bar graph shows the sales of company on July to December.



1. What is the amount of sales on July?

2. What is the amount of sales on August?

3. What is the amount of sales on September?

4. What is the amount of sales on October?

5. What is the amount of sales on November?



Proper Fractions

Exercise 24

Write the proper fraction from the given pie model.

1. $\frac{1}{9}$

2. $\frac{3}{6}$

3. $\frac{2}{4}$

4. $\frac{7}{9}$

5. $\frac{3}{4}$

6. $\frac{1}{12}$

7. $\frac{4}{9}$

8. $\frac{6}{8}$

9. $\frac{4}{5}$

10. $\frac{2}{3}$



Improper Fractions

Exercise 25

Write the improper fraction from the given pie model.

1. $\frac{25}{4}$

2. $\frac{20}{6}$

3. $\frac{22}{4}$

4. $\frac{34}{3}$

5. $\frac{17}{8}$

6. $\frac{61}{10}$

7. $\frac{106}{10}$

8. $\frac{49}{12}$

9. $\frac{17}{3}$

10. $\frac{61}{10}$

Exercise 26

Write the correct answer, which one is proper or improper fraction?

1. $\frac{36}{40}$ = proper fraction

2. $\frac{7}{5}$ = improper fraction

3. $\frac{17}{12}$ = improper fraction

4. $\frac{56}{4}$ = improper fraction

5. $\frac{8}{10}$ = proper fraction

6. $\frac{21}{25}$ = proper fraction

7. $\frac{30}{16}$ = improper fraction

8. $\frac{24}{63}$ = proper fraction

9. $\frac{37}{48}$ = proper fraction

10. $\frac{18}{19}$ = proper fraction

11. $\frac{31}{10}$ = improper fraction

12. $\frac{13}{7}$ = improper fraction

13. $\frac{6}{99}$ = proper fraction

14. $\frac{75}{21}$ = improper fraction

15. $\frac{15}{87}$ = proper fraction

16. $\frac{36}{30}$ = improper fraction

17. $\frac{88}{8}$ = improper fraction

18. $\frac{42}{68}$ = proper fraction

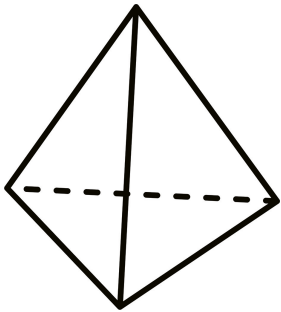
19. $\frac{57}{97}$ = proper fraction

20. $\frac{96}{23}$ = improper fraction

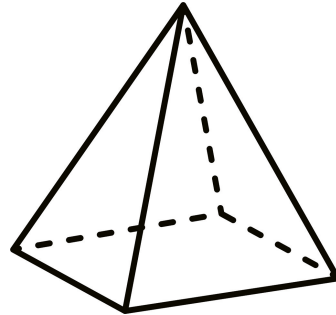
Pyramid

Pyramid has no curved side. All faces of prism are triangles. There are many types of pyramid, the pyramids are named by the shape of base.

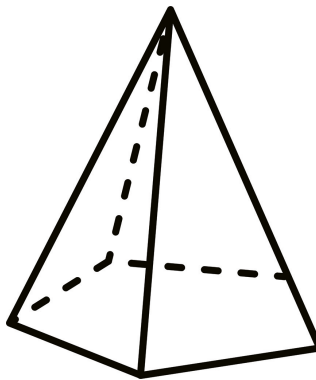
Triangular pyramid (พีระมิดฐานสามเหลี่ยม)
has triangle base.



Rectangular pyramid (พีระมิดฐานสี่เหลี่ยม)
has rectangle base.



Pentagonal pyramid (พีระมิดฐานห้าเหลี่ยม)
has pentagon base.





Exercise 115

SCORE

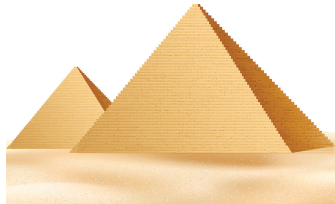
What is the 3D shape of the following picture?

1.



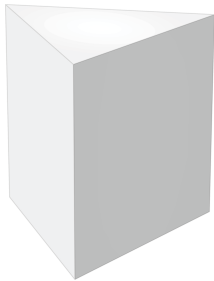
3D shape: _____

2.



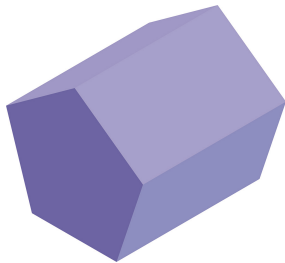
3D shape: _____

3.



3D shape: _____

4.



3D shape: _____

5.



3D shape: _____



2-Decimal place which less than 1

Exercise 74

Write the decimal form and word form from the given figure.

1. decimal form: 0.16 word form: sixteen hundredths
2. decimal form: 0.32 word form: thirty-two hundredths
3. decimal form: 0.57 word form: fifty-seven hundredths
4. decimal form: 0.14 word form: fourteen hundredths
5. decimal form: 0.81 word form: eighty-one hundredths
6. decimal form: 0.09 word form: nine hundredths
7. decimal form: 0.46 word form: forty-six hundredths
8. decimal form: 0.29 word form: twenty-nine hundredths
9. decimal form: 0.93 word form: ninety-three hundredths
10. decimal form: 0.42 word form: forty-two hundredths

Exercise 75

Write the words form of the following numbers.

1. thirty-eight hundredths
2. one hundredths
3. sixty-five hundredths
4. forty-two hundredths
5. seventy-three hundredths
6. ninety-five hundredths
7. fifty-one hundredths
8. twenty-six hundredths
9. nineteen hundredths
10. eighty-four hundredths

Exercise 76

Write the numbers of the following words.

1. 0.81
2. 0.12
3. 0.23
4. 0.54
5. 0.95
6. 0.76
7. 0.47
8. 0.68
9. 0.09
10. 0.35

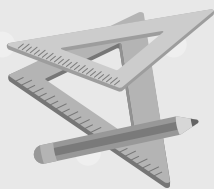


2-Decimal place which more than 1

Exercise 77

Write the decimal form and word form from the given figure.

1. decimal form: 1.38 word form: one and thirty-eight hundredths
2. decimal form: 1.04 word form: one and four hundredths
3. decimal form: 2.71 word form: two and seventy-one hundredths
4. decimal form: 3.15 word form: three and fifteen hundredths
5. decimal form: 2.96 word form: two and ninety-six hundredths
6. decimal form: 1.82 word form: one and eighty-two hundredths
7. decimal form: 2.23 word form: two and twenty-three hundredths
8. decimal form: 1.57 word form: one and fifty-seven hundredths
9. decimal form: 3.64 word form: three and sixty-four hundredths
10. decimal form: 1.49 word form: one and forty-nine hundredths



Chapter 10

Three-dimensional geometry and Volume of rectangle (Answer)



Sphere, cylinder and cone

Exercise 114

What is the 3D shape of the following picture?

- | | | | | |
|-----------|-------------|-------------|---------|--------------|
| 1. sphere | 2. cone | 3. cylinder | 4. cone | 5. sphere |
| 6. sphere | 7. cylinder | 8. cone | 9. cone | 10. cylinder |

Prism and pyramid

Exercise 115

What is the 3D shape of the following picture?

- | | | |
|----------------------|------------------------|------------------------|
| 1. rectangular prism | 2. rectangular pyramid | 3. triangular prism |
| 4. pentagonal prism | 5. triangular pyramid | 6. rectangular prism |
| 7. rectangular prism | 8. triangular pyramid | 9. rectangular pyramid |
| 10. pentagonal prism | | |

Finding the volume

Exercise 116

Count the cube and write the volume of the given cube.

- | | | | | |
|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| 1. 5 unit ³ | 2. 9 unit ³ | 3. 14 unit ³ | 4. 20 unit ³ | 5. 24 unit ³ |
| 6. 18 unit ³ | 7. 29 unit ³ | 8. 24 unit ³ | 9. 20 unit ³ | 10. 20 unit ³ |

Volume of rectangle

Exercise 117

Find the volume of the given figure.

- | | | | | |
|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. 4 cm ³ | 2. 3 m ³ | 3. 10 m ³ | 4. 15 cm ³ | 5. 18 cm ³ |
| 6. 30 m ³ | 7. 24 cm ³ | 8. 18 cm ³ | 9. 10 m ³ | 10. 15 m ³ |