

## 2022 PSLE Simulation Question-2

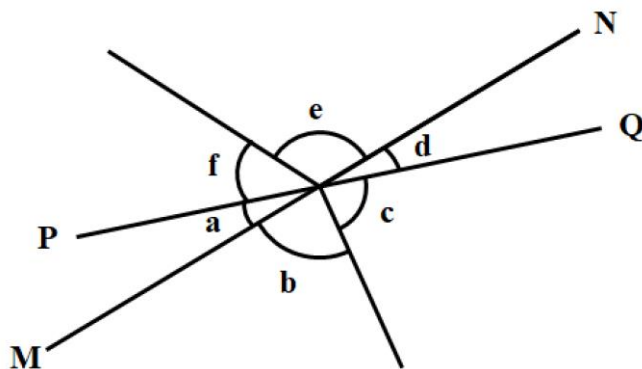
### PAPER 1

**Question 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each. For each, four options are given. One of them is the correct answer.**

1. Round off 52701 to the nearest thousand.

- (1) 50000
- (2) 53000
- (3) 52700
- (4) 52000

2. In the figure, MN and PQ are straight lines. Which one of the following is true?

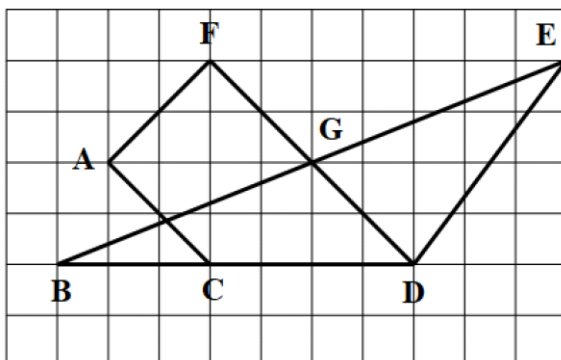


- (1)  $\angle c + \angle d = 90^\circ$
- (2)  $\angle b + \angle c = 180^\circ$
- (3)  $\angle e = \angle b$
- (4)  $\angle a = \angle d$

3.  $70 + \frac{7}{10} + \frac{7}{100} = \underline{\hspace{2cm}}$ .

- (1) 77.07
- (2) 70.77
- (3) 70.077
- (4) 70.707

4. Which two lines are perpendicular to each other?



- (1) BE and FD
- (2) AC and AF
- (3) DE and DF
- (4) AC and DF

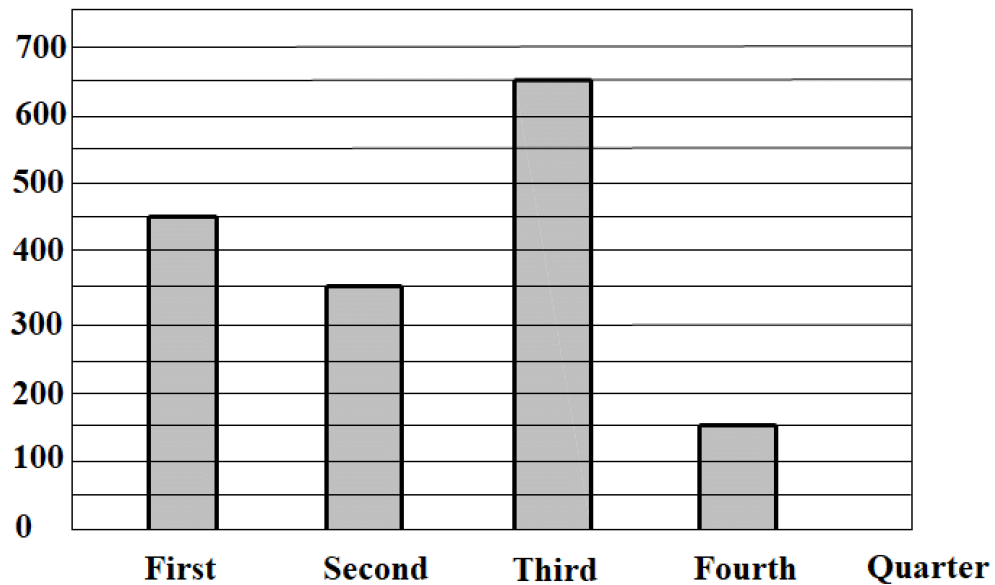
5. Find the value of  $8k + 7 - 2k$  when  $k = 3.4$ .

- (1) 20.6
- (2) 30.8
- (3) 24
- (4) 27.4

Use the information below to answer Question 6 to 7.

The graph shows the number of clothes sold by a shop in four quarters.

**Number of  
clothes**



6. How many clothes did this shop sell in the second quarter?

- (1) 300
- (2) 350
- (3) 250
- (4) 400

7. What fraction of the clothes were sold in the fourth quarter?

- (1)  $\frac{5}{16}$
- (2)  $\frac{3}{32}$
- (3)  $\frac{2}{32}$
- (4)  $\frac{15}{16}$

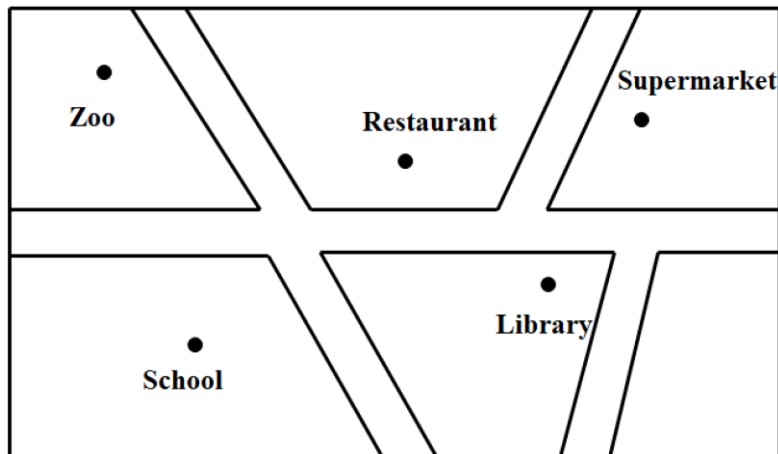
8. Jack paid \$88.2 for 7 pencils. How much did each pencil cost?

- (1) 12.6
- (2) 12.7
- (3) 12.8
- (4) 10.6

9. Mary was in a library from 7.50 a.m. to 2.00 p.m. yesterday. How long did she stay in the library?

- (1) 6 h 50 min
- (2) 5 h 10 min
- (3) 5 h 50 min
- (4) 6 h 10 min

10. The figure below shows a part of a map in a city. Which building is south-east of the restaurant?



- (1) Zoo
- (2) School
- (3) Library
- (4) Supermarket

11. Arrange the weight below from the heaviest to the lightest.

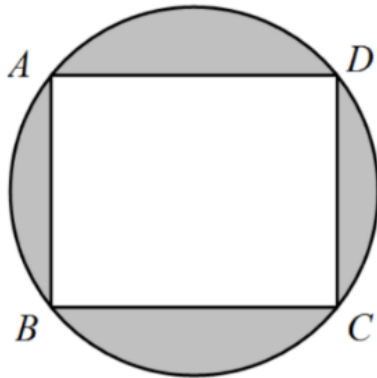
- a.  $5.25\text{kg}$    b.  $5\frac{1}{3}\text{kg}$    c.  $5\text{kg}500\text{g}$    d.  $\frac{26}{5}\text{kg}$

- |     | heaviest |   | lightest |   |
|-----|----------|---|----------|---|
| (1) | c        | a | b        | d |
| (2) | c        | b | a        | d |
| (3) | d        | c | b        | a |
| (4) | d        | b | c        | a |

12. A number when divided by 20 gives a remainder of 6. Which of the following can be added to the number to change it to a multiple of 5?

- (1) 2
- (2) 3
- (3) 4
- (4) 5

13. In rectangle ABCD,  $AD = 4\text{cm}$ ,  $AB = 3\text{cm}$ ,  $AC = 5\text{cm}$ . Find the area of the shaded part.  
( $\pi = 3.14$ )



- (1)  $66.5\text{cm}^2$
- (2)  $7.625\text{cm}^2$
- (3)  $19.625\text{cm}^2$
- (4)  $6.625\text{cm}^2$

14. At first, a school had a total of 325 male and female students. In the new school year, the number of male students increased by 25 and the proportion of female students reduced by  $\frac{1}{20}$ .

Then the total number of students increased by 16. Find the number of male students now.

- (1) 170
- (2) 145
- (3) 180
- (4) 155

15. The ratio of male to female members of a club was  $3:2$ . All the members were divided into groups A, B and C. Given that the ratio of the number of people in group A, B, and C was  $10:8:7$ . In group A, the ratio of male to female members was  $3:1$ . In group B, the ratio of male to female members was  $5:3$ . Find the ratio of male to female members in group C.

- (1)  $3:7$
- (2)  $1:3$
- (3)  $5:7$
- (4)  $5:9$

**Question 16 to 20 carry 1 mark each. Question 21 to 30 carry 2 marks each. Write your answer in the spaces provided.**

16. Find the value of  $736 \div 230$ .

Ans: \_\_\_\_\_

17. Find the value of  $\frac{5}{6} + \frac{4}{9}$ .

Ans: \_\_\_\_\_

18. Find the value of  $13.71 - 5.86$ .

Ans: \_\_\_\_\_

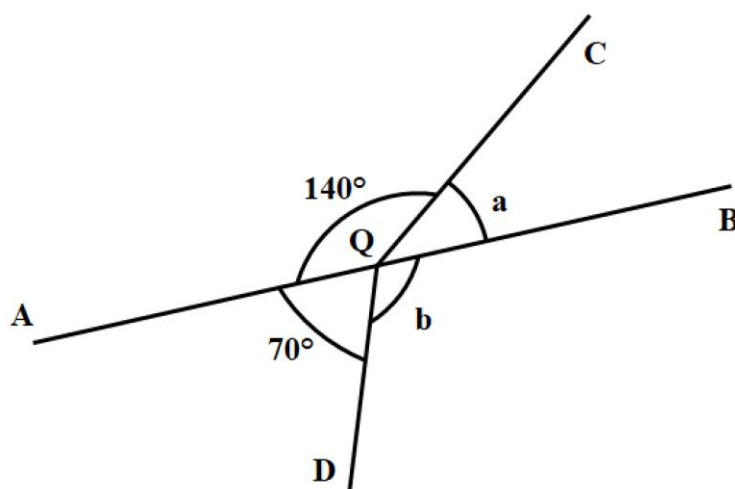
19. Find the value of  $5.27 \times 40$ .

Ans: \_\_\_\_\_

20. Write down the common multiple of 8 and 14 that is smaller than 60.

Ans: \_\_\_\_\_

21. In the figure, AQB is a straight line. Find  $\angle a + \angle b$ .

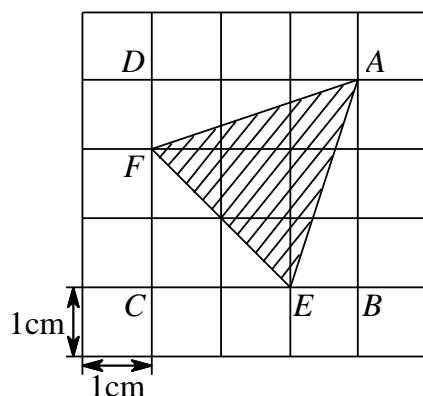


Ans: \_\_\_\_\_

22. It takes 150 minutes to fill a swimming pool. What fraction of the pool will be filled in 1 hour? Give your answer in the simplest form.

Ans: \_\_\_\_\_

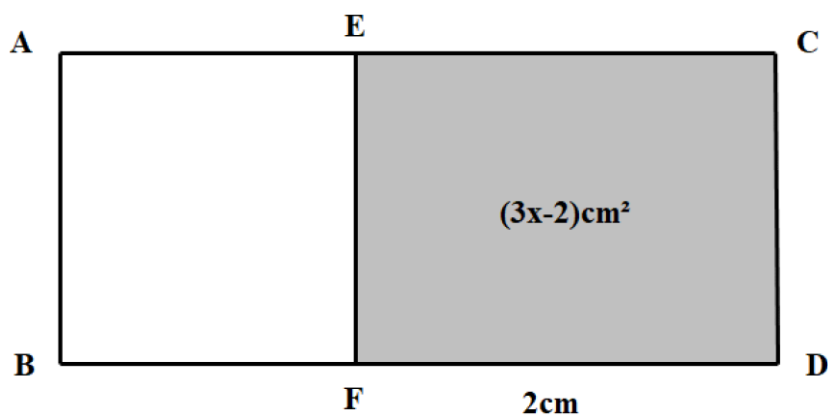
23. Find the area of the shaded part.



Ans: \_\_\_\_\_  $cm^2$

24. The figure is made up of square ABFE and rectangle EFDC. The area of EFDC is

$(3x-2)cm^2$  and  $DF = 2cm$ .



Find the perimeter of ABCD in terms of  $x$ . Give your answer in the simplest form.

Ans: \_\_\_\_\_  $cm$

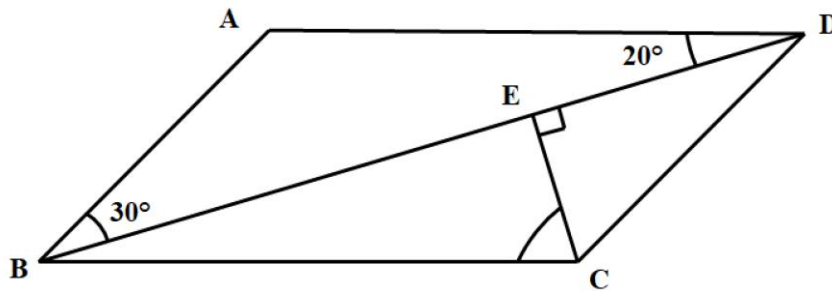
25. Find the value of  $33 \div 88$ . Give your answer correct to 2 decimal places.

Ans: \_\_\_\_\_

26. A garden contains pink, blue and yellow flowers.  $\frac{3}{8}$  of the flowers are pink and  $\frac{2}{3}$  of the remaining flowers are yellow. What fraction of the flowers in the garden are blue?

Ans: \_\_\_\_\_

27. ABCD is a parallelogram. AED is a straight line.  $\angle ABD = 30^\circ$ ,  $\angle ADB = 20^\circ$  and  $\angle DEC$  is a right angle. Find  $\angle BCE$ .



Ans: \_\_\_\_\_

28. A, B and C are three numbers. Given that  $A : (B + C) = 4 : 3$ ,  $B : C = 2 : 7$ . Find  $A : B : C$ .

Ans: \_\_\_\_\_

29. Jack read a book at home. After reading 130 pages, he decided to read the remaining parts in 8 days. If he reads the same number of pages every day during the 8 days, he will read  $\frac{5}{22}$  of the book in 3 days. Find the total number of pages of this book.

Ans: \_\_\_\_\_

30. The purchasing price of goods A and B is \$200 in total. Goods A are priced at 30% profit and goods B are priced at 20% profit. Later, both goods A and B were sold at a 10% discount and finally gained profit of \$27.7. Find the purchasing price of goods A.

Ans: \$ \_\_\_\_\_

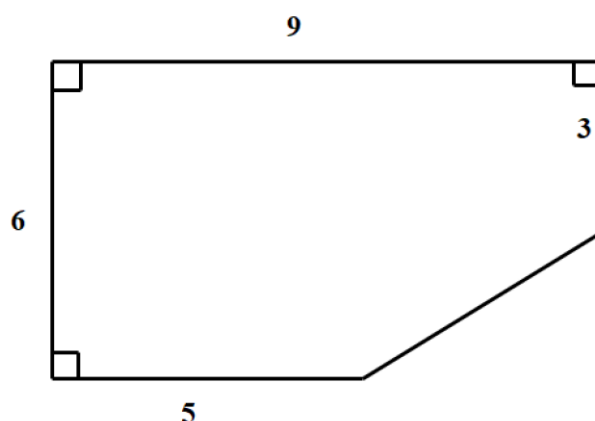
PAPER 2

**Question 1 to 5 carry 2 mark each. Show your working clearly and write your answer in the spaces provided. For questions which require units, give your answers in the units stated.**

1. Alex paid \$875 for 2 bikes and 5 skateboards. The price of a skateboard was  $\frac{3}{5}$  of the price of a bike. How much did Alex pay for a bike?

Ans: \$ \_\_\_\_\_

2. In the figure below, find the area of the pentagon.



Ans: \_\_\_\_\_

3. Mary had a basket of apples. She ate 15 apples in the morning and  $\frac{3}{7}$  of the remaining apples in the afternoon. After that, there was  $\frac{2}{5}$  of the total number of apples left. How much apples did she ate in the afternoon?

Ans: \_\_\_\_\_

4. The policeman and the thief were 150 metres apart. The policeman's speed was 11m/s and the thief's speed was 8m/s. They did not change their speeds throughout. What distance would the policeman have cycled when he caught up with the thief?

Ans: \_\_\_\_\_m

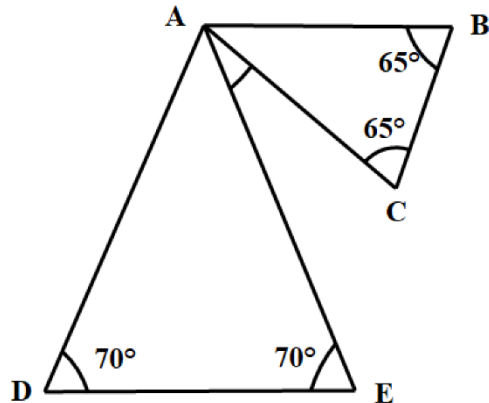
5. Gloria bought 200 chocolates and 120 candies for her students. She divided the chocolates equally among them and had 15 chocolates left. She also divided the candies equally among them and had 9 candies left. Find the number of students.

Ans: \_\_\_\_\_



For question 6 to 17, show your working clearly and write your answer in the spaces provided. (45 marks)

6. In the figure below, AB is parallel to DE. Find  $\angle CAE$ .



Ans: \_\_\_\_\_

7. The first 15 numbers of a number pattern are given below.

1, 3, 7, 4, 1, 3, 7, 4, 1, 3, 7, 4, 1, 3, 7, ...

(a) What is the 2022<sup>nd</sup> number?

(b) What is the sum of the first 2022 numbers?

Ans: (a) \_\_\_\_\_

Ans: (b) \_\_\_\_\_

8. At the beginning, Teacher Liu had 70 pens and some pencils. After he gave away 30 pens and 35% of the pencils, he had a total of 170 pens and pencils left. How many pencils did the teacher have at the beginning?

Ans: \_\_\_\_\_

9. The table shows the number of clothes sold by 3 shops this week.

Shops	Number of Clothes
A	54
B	3j
C	5j-6

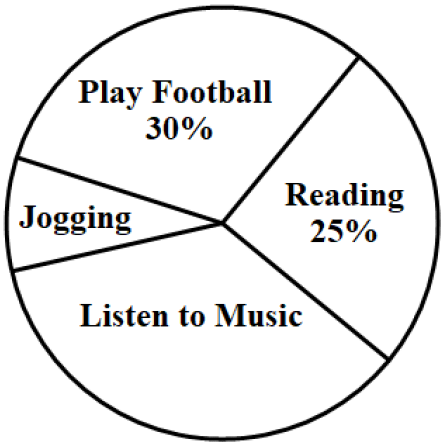
(a) Find the total number of clothes A, B, and C sold this week. Express your answer in terms of  $j$  in the simplest form.

(b) If  $j = 5$ , find the average number of clothes the 3 shops sold.

Ans: (a) \_\_\_\_\_

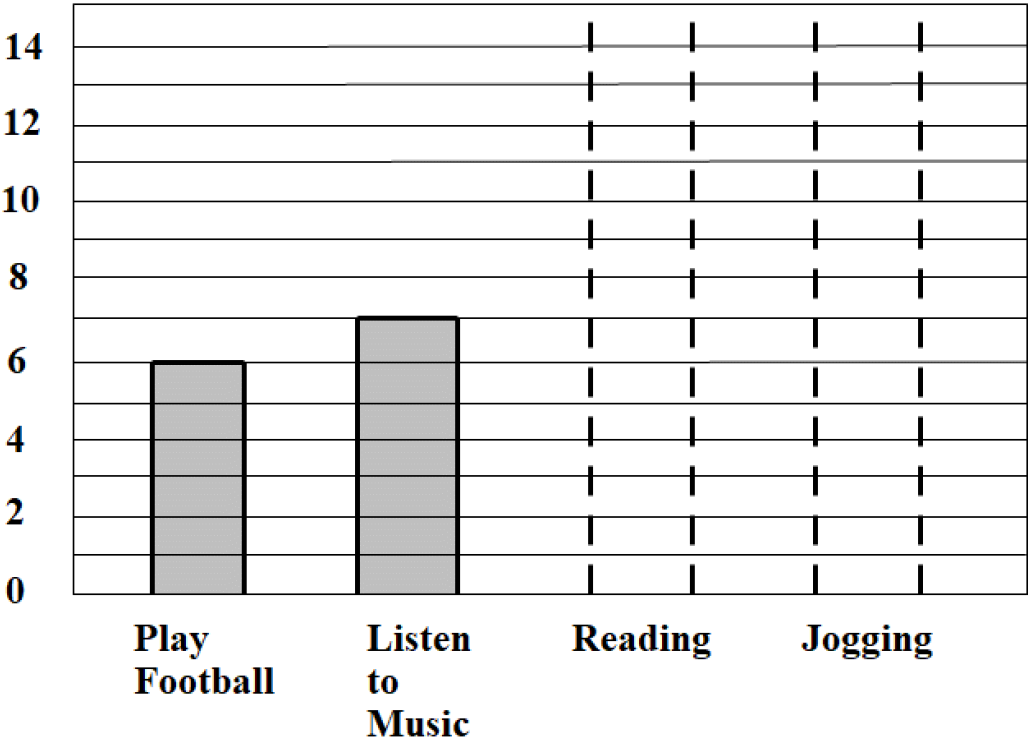
Ans: (b) \_\_\_\_\_

10. The pie chart below shows how Jack spent his time on the weekend.



The amount of time spent is also represented by the bar graph below. The bars for the amount of time spent on Reading and Jogging have not been drawn.

**Hours**



- (a) What percentage of his time did Jack spend on Jogging?
- (b) What fraction of his time did Jack spend on “Listen to Music”?
- (c) Draw the bars for the amount of time spent on Reading and Jogging in the graph above.

Ans: (a) \_\_\_\_\_

Ans: (b) \_\_\_\_\_

11. 80% of the animals in zoo A and 70% of the animals in zoo B are female. Both zoo A and zoo B have the same number of male animals. Zoo A has 25 more female animals than zoo B. Find the number of animals in zoo A.

Ans: \_\_\_\_\_

12. At 9.20 a.m., Jerry started walking at 6 km/h from his home to a farm, 60km away. Later, a tractor with a speed of 18 km/h took him to the farm. The total traveling time was 6 hours.

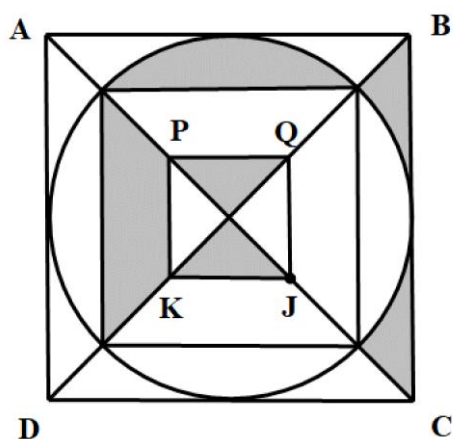
(a) What time did he arrive at the farm?

(b) How far did he walk?

Ans: (a) \_\_\_\_\_

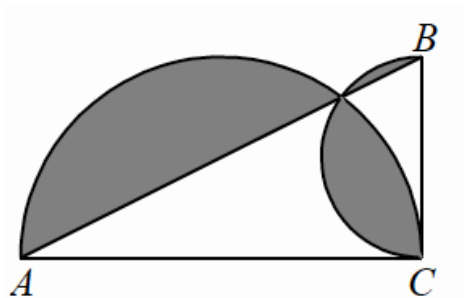
Ans: (b) \_\_\_\_\_

13. The side of square ABCD is  $10\text{cm}$ . The area of the shaded part is  $26\text{cm}^2$ . Find the length of side of square PQJK.



Ans: \_\_\_\_\_  $\text{cm}$

14. The figure shows a right-angled triangle ABC.  $AC = 4\text{cm}$ ,  $BC = 2\text{cm}$ . Find the area of the shaded part. Take  $\pi = 3.14$ .



Ans: \_\_\_\_\_  $\text{cm}^2$

15. The first four figures of a pattern are shown below.



Figure 1

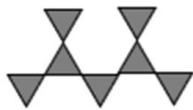


Figure 2



Figure 3

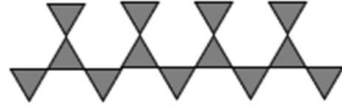


Figure 4

The table shows the number of triangles used for each figure.

Figure Number	1	2	3	4	5	...	n
Number of triangles	4	7	10			...	

- (a) Fill in the table for Figure 4 and Figure 5.  
 (b) Fill in the table for Figure  $n$ .  
 (c) Find the number of triangles in Figure 2020.  
 (d) Alex uses 298 triangles to form Figure  $x$ . Find the value of  $x$ .

Ans: (a) \_\_\_\_\_  
 Ans: (b) \_\_\_\_\_  
 Ans: (c) \_\_\_\_\_  
 Ans: (d) \_\_\_\_\_

16. Jack and Tony had a total of \$86. Later, Jack spent  $\frac{4}{9}$  of his money and Tony spent \$16.

Then they had the same amount of money.

- (a) Find the amount of money of Jack at first.  
 (b) Find the amount of money of Tony at first.

Ans: (a) \_\_\_\_\_  
 Ans: (b) \_\_\_\_\_

17. A teacher decided to give some candies to students A, B, and C. According to the original plan, the ratio of the number of candies of A to B to C was  $5:4:3$ . In fact, the ratio of the number of candies of A to B to C was  $7:6:5$ . One of them got 15 more candies than the original plan.

- (a) Which one got 15 more candies than the original plan?  
 (b) How many candies did he get in fact?

Ans: (a) \_\_\_\_\_  
 Ans: (b) \_\_\_\_\_