X1 score

1 (C) Which equation gives a different answer?
(A) $108 \div 6 \times 2 + 6$　　(B) $(108 \div 6 \times 2) + 6$
(C) $108 \div (6 \times 2 + 6)$　(D) $(108 \div 6 \times 2 + 6)$
(E) $(108 \div 6) \times 2 + 6$

X2 score

2 (D) $7.85 + 6.231 - 0.497 = ?$
(A) 2.116　(B) 8.347　(C) 13.087　(D) 13.584　(E) 14.578

X3 score

3 (A) There are 36 pencils in a box. Sandy takes 10 pencils, Tom takes $\frac{1}{6}$ of a box, Kelly takes $\frac{2}{9}$ of a box, and the rest belongs to Gary. Who has the most pencils?
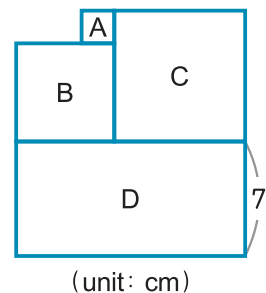(A) Gary　(B) Kelly　(C) Tom　(D) Sandy　(E) Equal

X4 score

4 (E) If $3\frac{7}{8} \times 16 = x$ and $x - y = 43$, what is $x + y = ?$
(A) 50　(B) 57　(C) 62　(D) 71　(E) 81

X5 score

5 (C) If $\frac{3}{5} < \frac{z}{20} < \frac{3}{4}$, and $\frac{z}{7}$ is the simplest form of the fraction, what is $z = ?$
(A) 11　(B) 12　(C) 13　(D) 14　(E) 15

X6 score

6 (D) We know A, B, C are squares and D is a rectangle. B has an area of 36 cm^2 and D has a perimeter of 42 cm. What's the total area of A and D?
(A) 96　(B) 98　(C) 100
(D) 102　(E) 106　cm^2

(unit: cm)

X7 score

7 (E) Choose the correct rotation of the picture on the left.

(A) (B) (C)

(D) (E)

X8 score

8 (D) Happy Farm harvested oranges and packed 28 oranges into one box. If they can harvest a maximum of 450 oranges, how many full boxes are there at most?
(A) 448 (B) 422 (C) 28 (D) 16 (E) 15 boxes

X9 score

9 (B) A vase is being sold at an auction. The person who offers the highest price can buy the vase. Read the dialogue below and find out who can buy the vase.

> Mrs. Lin： I'm willing to pay 157 one-hundred-dollar bills.
> Mr. Wang： I'm willing to pay 15 one-thousand-dollar cheques and 16 one-hundred-dollar bills.
> Mr. Hsu： I'm willing to pay 3 one-thousand-dollar cheques and 128 one-hundred-dollar bills.
> Mr. Chou： I'm willing to pay 15 one-hundred-dollar bills and 16 one-thousand-dollar cheques.
> Mrs. Tsai： I'm willing to pay $16,600.

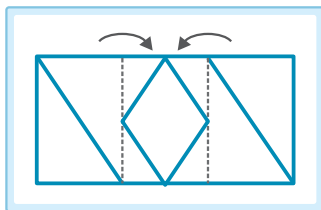(A) Mr. Wang (B) Mr. Chou (C) Mrs. Tsai
(D) Mrs. Lin (E) Mr. Hsu

X10 score

10 (D) The figure on the right has 90-degree angles for corners. Find it's total area.
(A) 78.64 (B) 80.56 (C) 85.34
(D) 87.22 (E) 90.42 cm²

12.46, 8, 12.46, 15 (unit： cm)
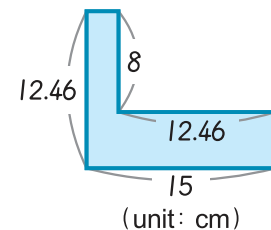
X11 score

11 (A)

After folding the paper like shown on the left, what will you get?

(A)   (B)   (C)

(D)   (E)

X12 | score

12 (**E**) If ☀ > ▲ > ■ > ♥ , and ☀ = $7\ell\ 120\ m\ell$, ■ = $6{,}820\ m\ell$, ♥ = $5.9\ \ell$, what is ▲ = ?

（A）$6.8\ \ell$　（B）$63\ d\ell$　（C）$7.5\ \ell$　（D）$75\ d\ell$　（E）$6{,}923\ m\ell$

X13 | score

13 (**A**) Vancouver is 15 hours behind Taiwan time. If it is $6:22$ am on August 30 in Taiwan, what time is it in Vancouver?
（A）August 29, $3:22$ pm　（B）August 29, $3:22$ am
（C）August 30, $3:22$ pm　（D）August 30, $3:22$ am
（E）August 31, $3:22$ pm

（number of students）
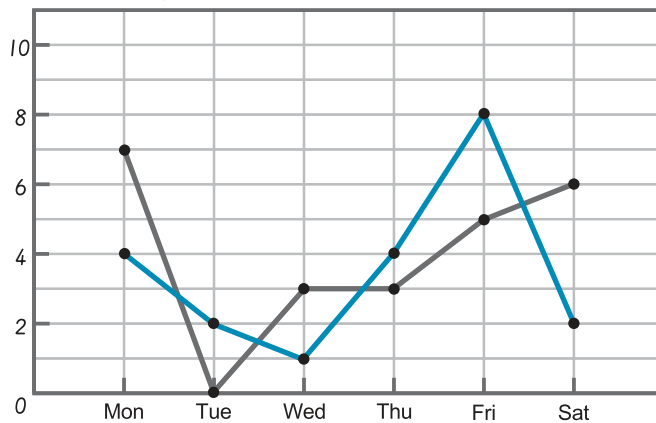
▲ Number of students that registered for MPM over two different weeks

The line graph shows how many students registered for an MPM class during two different weeks. Use it to answer **14** – **15** .
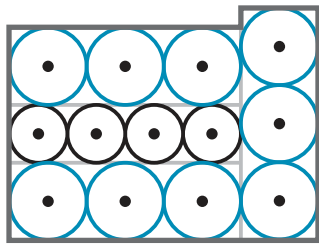
X14 | score

14 (**C**) What is the difference in the number of students registered between the two weeks?
（A）1　（B）2　（C）3　（D）4　（E）5　　students

X15 | score

15 (**D**) In ～ week, what's the difference in registrations between the day with the most registrations and the day with the least registrations?
（A）4　（B）5　（C）6　（D）7　（E）8　　students

2019
3
5th

X16 score **16** (E)

If ○ has a radius of 6 cm, how long is the perimeter of ⬜ ?

(A) 48 (B) 72 (C) 96
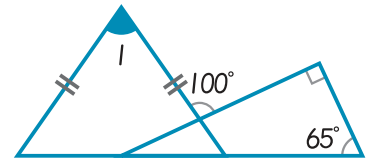(D) 126 (E) 168   cm

X17 score **17** (B) Follow the pattern.

6 8 3 7 6 8 3 7 6 8 3 ......

What's the number and shape of the 34th item?

(A) 6   (B) 8   (C) 3   (D) 6   (E) 8

X18 score **18** (D) There is a right triangle and an isosceles triangle on the right. Find ∠1 = ?
(A) 25° (B) 55° (C) 60° (D) 70° (E) 75°
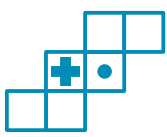
1   100°   65°
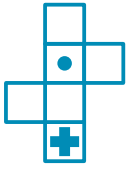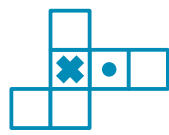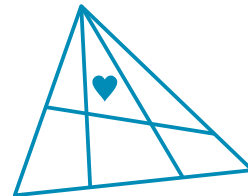
X19 score **19** (D)

If the cube on the left is expanded, what is the correct figure?

(A)   (B)   (C)

(D)   (E)

X20 score **20** (C) How many triangles have 💙 on it?
(A) 6 (B) 7 (C) 8 (D) 9 (E) 10

X21 score **21** (B) Nick has $500 more than Sue. After Nick gives Sue $10, he will still have 7 times more money than Sue. How much money did Sue have at first?
(A) $60 (B) $70 (C) $80 (D) $90 (E) $100

More questions are on the next page.

X22 score

22 (C)

① ⑤ ① ① ⑤ ⑩ ① ⑤ ① ① ⑤ ⑩ ······ ⑩

Looking at the number pattern above, what can the sum of the pattern be?

(A) 89　(B) 108　(C) 115　(D) 139　(E) 140

X23 score

23 (A)

March　2019
25
Monday

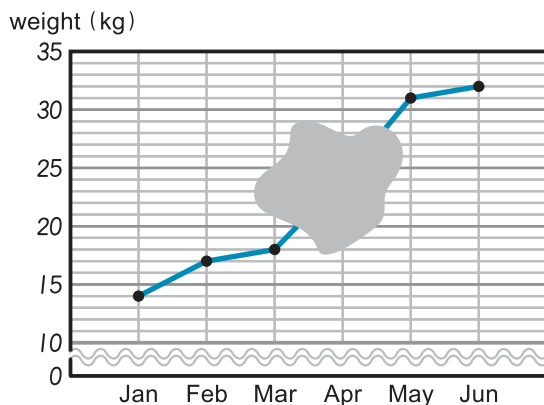It's 70 days after the date shown on the left. What's the date?

(A) Monday, June 3　(B) Tuesday, June 3
(C) Tuesday, June 4　(D) Wednesday, June 4
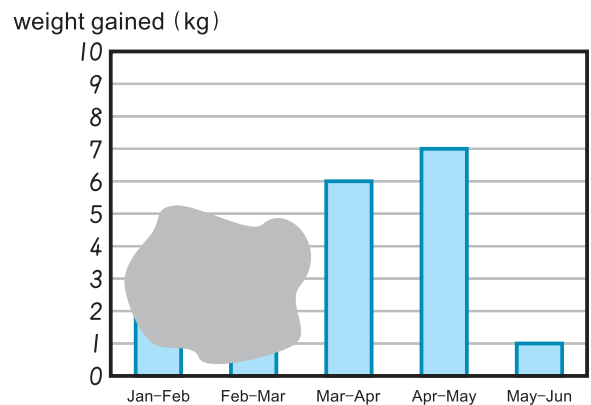(E) Wednesday, June 5

X24 score

24 (E) $P \times Q = 57$ and $P \div Q = 6$. What would not be correct?

(A) $228 \times P \div Q = 1,368$　(B) $P \times 10 \times Q = 570$
(C) $P \div Q \times 5 = 30$　　　(D) $342 \div P \div Q = 6$
(E) $285 \div P \times Q = 5$

Nancy measured her puppy's weight from January to June and graphed it in Graph 1 and Graph 2 .

weight (kg)

Graph 1

weight gained (kg)

Graph 2

Look at Graph 1 and Graph 2 to answer **25** – **27** .

X25 score

25 (C) Graph 1 has a stain on it during the month of April.

What could be the puppy's weight during April?

(A) 22　(B) 23　(C) 24　(D) 25　(E) 26　kg

X26 score

26 (D) There's also another stain on Graph 2 . What could be the total weight gained as shown by the two hidden bars?
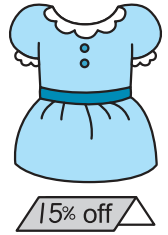
(A) 1　(B) 2　(C) 3　(D) 4　(E) 5　kg

X27 score

27 (D) During which months did the puppy grow the most in weight?

(A) Jan – Feb　(B) Feb – Mar　(C) Mar – Apr
(D) Apr – May　(E) May – Jun

X28 score

28 (E) Judy paid $181 altogether for a dress and a hat. What was the original price of the dress (before the sale)?
(A) $113　(B) $125　(C) $136
(D) $153　(E) $160

$45

15% off

X29 score

29 (B) If $\dfrac{1}{\Psi}+\dfrac{3}{\Psi}+\dfrac{4}{\Psi}+\dfrac{7}{\Psi}+\dfrac{9}{\Psi}+\dfrac{12}{\Psi}+\dfrac{14}{\Psi}=10$, what is $\Psi=?$
(A) 2　(B) 5　(C) 10　(D) 20　(E) 25

X30 score

30 (A) How many right triangles are there altogether in the figure on the right?
(A) 17　(B) 18　(C) 19　(D) 20　(E) 21

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6
5th