# 実戦演習足りてますか?

「実際の入試に出てくるような問題をやりましょう」

誰もが知ってる、効率的に勉強するための方法です。

じゃあどんな問題をやればいいの?どのテキストがいいの?

そんな不安を解消します!

英語・数学マスターを受けて、「英語・数学マスター」になろう!!

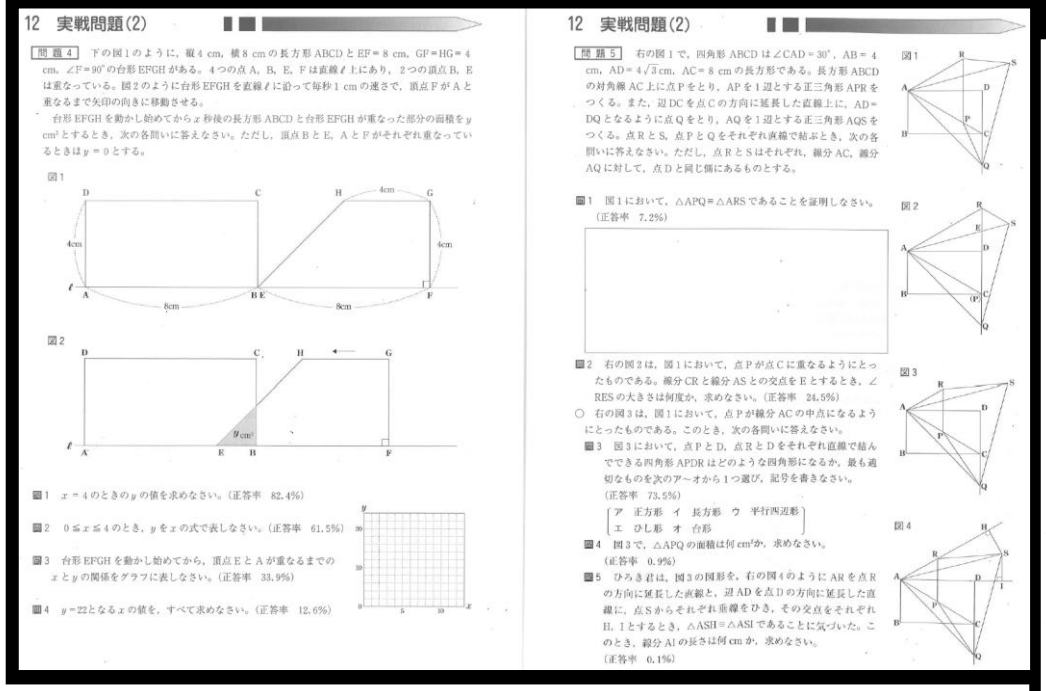
初めて見る問題に、焦ってしまう。

時間配分がうまくいかない。

長野県の傾向にあった演習がしたい。

自分だけで入試レベルの問題に取り組むのは大変。

## 数学マスター 19:30〜21:10 ハイ:木曜日/スタ:火曜日



12 実戦問題(2)

問題4 下の図1のように、縦4 cm，横8 cmの長方形ABCDとEF＝8 cm，GF＝HG＝4 cm，∠F＝90°の台形EFGHがある。4つの点A，B，E，Fは直線ℓ上にあり，2つの頂点B，Eは重なっている。図2のように台形EFGHを直線ℓに沿って毎秒1 cmの速さで，頂点FがAと重なるまで矢印の向きに移動させる。

台形EFGHを動かし始めてから$x$秒後の長方形ABCDと台形EFGHが重なった部分の面積を$y$ cm²とするとき，次の各問いに答えなさい。ただし，頂点BとE，AとFがそれぞれ重なっているときは$y=0$とする。

図1

図2

■1 $x=4$のときの$y$の値を求めなさい。(正答率 82.4%)

■2 $0 \leqq x \leqq 4$のとき，$y$を$x$の式で表しなさい。(正答率 61.5%)

■3 台形EFGHを動かし始めてから，頂点EとAが重なるまでの$x$と$y$の関係をグラフに表しなさい。(正答率 33.9%)

■4 $y=22$となる$x$の値を，すべて求めなさい。(正答率 12.6%)

12 実戦問題(2)

問題5 右の図1で，四角形ABCDは∠CAD＝30°，AB＝4 cm，AD＝$4\sqrt{3}$ cm，AC＝8 cmの長方形である。長方形ABCDの対角線AC上に点Pをとり，APを1辺とする正三角形APRをつくる。また，辺DCを点Cの方向に延長した直線上に，AD＝DQとなるように点Qをとり，AQを1辺とする正三角形AQSをつくる。点RとS，点PとQをそれぞれ直線で結ぶとき，次の各問いに答えなさい。ただし，点RとSはそれぞれ，線分AC，線分AQに対して，点Dと同じ側にあるものとする。

■1 図1において，△APQ≡△ARSであることを証明しなさい。(正答率 7.2%)

■2 右の図2は，図1において，点Pが点Cに重なるようにとったものである。線分CRと線分ASとの交点をEとするとき，∠RESの大きさは何度か，求めなさい。(正答率 24.5%)

○ 右の図3は，図1において，点Pが線分ACの中点になるようにとったものである。このとき，次の各問いに答えなさい。

■3 図3において，点PとD，点RとDをそれぞれ直線で結んでできる四角形APDRはどのような四角形になるか，最も適切なものを次のア〜オから1つ選び，記号を書きなさい。(正答率 73.5%)

ア 正方形 イ 長方形 ウ 平行四辺形
エ ひし形 オ 台形

■4 図3で，△APQの面積は何cm²か，求めなさい。(正答率 0.9%)

■5 ひろき君は，図3の図形を，右の図4のようにARを点Rの方向に延長した直線と，辺ADを点Dの方向に延長した直線に，点Sからそれぞれ垂線をひき，その交点をそれぞれH，Iとするとき，△ASH≡△ASIであることに気づいた。このとき，線分AIの長さは何cmか，求めなさい。(正答率 0.1%)

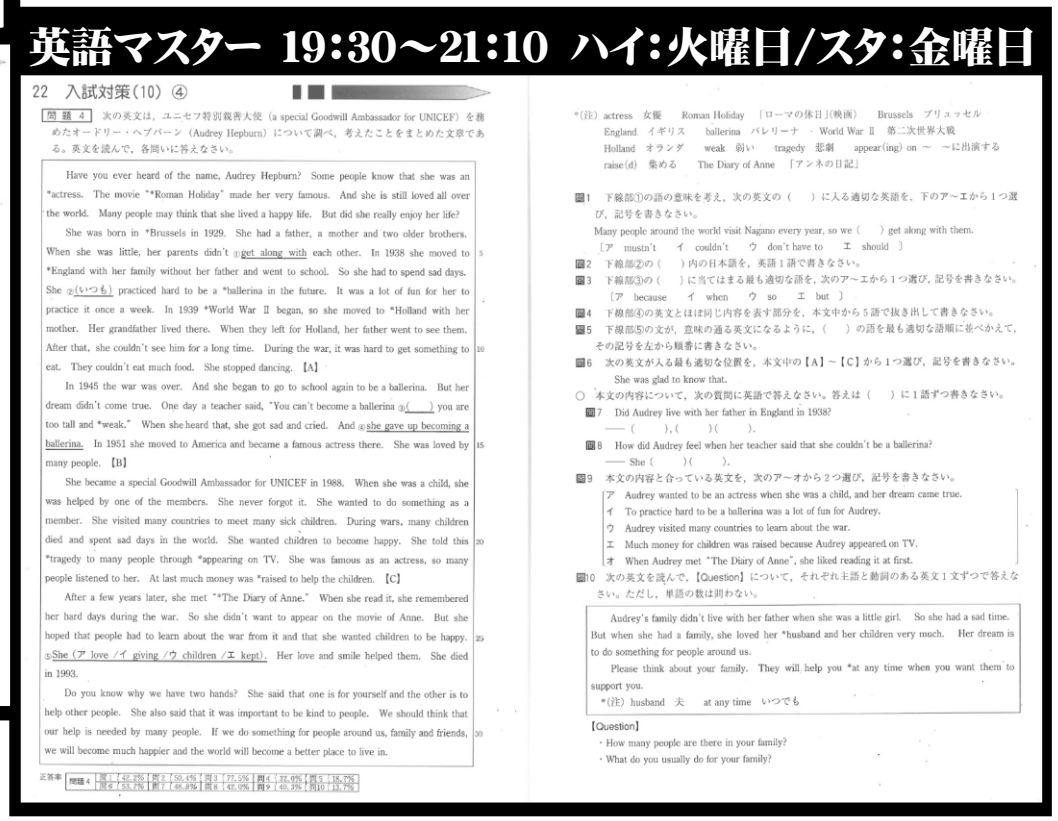
図1

図2

図3

図4

## 英語マスター 19:30〜21:10 ハイ:火曜日/スタ:金曜日



22 入試対策(10) ④

問題4 次の英文は，ユニセフ特別親善大使（a special Goodwill Ambassador for UNICEF）を務めたオードリー・ヘプバーン（Audrey Hepburn）について調べ，考えたことをまとめた文章である。英文を読んで，各問いに答えなさい。

Have you ever heard of the name, Audrey Hepburn? Some people know that she was an *actress. The movie "*Roman Holiday" made her very famous. And she is still loved all over the world. Many people may think that she lived a happy life. But did she really enjoy her life?

She was born in *Brussels in 1929. She had a father, a mother and two older brothers. When she was little, her parents didn't ⓐget along with each other. In 1938 she moved to *England with her family without her father and went to school. So she had to spend sad days. She ⓑ(いつも) practiced hard to be a *ballerina in the future. It was a lot of fun for her to practice it once a week. In 1939 *World War Ⅱ began, so she moved to *Holland with her mother. Her grandfather lived there. When they left for Holland, her father went to see them. After that, she couldn't see him for a long time. During the war, it was hard to get something to eat. They couldn't eat much food. She stopped dancing. 【A】

In 1945 the war was over. And she began to go to school again to be a ballerina. But her dream didn't come true. One day a teacher said, "You can't become a ballerina ⓒ(　　) you are too tall and *weak." When she heard that, she got sad and cried. And ⓓshe gave up becoming a ballerina. In 1951 she moved to America and became a famous actress there. She was loved by many people. 【B】

She became a special Goodwill Ambassador for UNICEF in 1988. When she was a child, she was helped by one of the members. She never forgot it. She wanted to do something as a member. She visited many countries to meet many sick children. During wars, many children died and spent sad days in the world. She wanted children to become happy. She told this *tragedy to many people through *appearing on TV. She was famous as an actress, so many people listened to her. At last much money was *raised to help the children. 【C】

After a few years later, she met "*The Diary of Anne." When she read it, she remembered her hard days during the war. So she didn't want to appear on the movie of Anne. But she hoped that people had to learn about the war from it and that she wanted children to be happy. ⓔShe (ア love /イ giving /ウ children /エ kept). Her love and smile helped them. She died in 1993.

Do you know why we have two hands? She said that one is for yourself and the other is to help other people. She also said that it was important to be kind to people. We should think that our help is needed by many people. If we do something for people around us, family and friends, we will become much happier and the world will become a better place to live in.

*(注) actress 女優　Roman Holiday 「ローマの休日」(映画)　Brussels ブリュッセル
England イギリス　ballerina バレリーナ　World War Ⅱ 第二次世界大戦
Holland オランダ　weak 弱い　tragedy 悲劇　appear(ing) on 〜 〜に出演する
raise(d) 集める　The Diary of Anne 「アンネの日記」

■1 下線部①の語の意味を考え，次の英文の（　）に入る適切な英語を，下のア〜エから1つ選び，記号を書きなさい。
Many people around the world visit Nagano every year, so we (　　) get along with them.
〔ア mustn't　イ couldn't　ウ don't have to　エ should 〕

■2 下線部②の（　）内の日本語を，英語1語で書きなさい。

■3 下線部③の（　）に当てはまる最も適切な語を，次のア〜エから1つ選び，記号を書きなさい。
〔ア because　イ when　ウ so　エ but 〕

■4 下線部④の英文とほぼ同じ内容を表す部分を，本文中から5語で抜き出して書きなさい。

■5 下線部⑤の文が，意味の通る英文になるように，（　）の語を最も適切な語順に並べかえて，その記号を左から順番に書きなさい。

■6 次の英文が入る最も適切な位置を，本文中の【A】〜【C】から1つ選び，記号を書きなさい。
She was glad to know that.

○ 本文の内容について，次の質問に英語で答えなさい。答えは（　）に1語ずつ書きなさい。

■7 Did Audrey live with her father in England in 1938?
—— (　　), (　　)(　　).

■8 How did Audrey feel when her teacher said that she couldn't be a ballerina?
—— She (　　)(　　).

■9 本文の内容と合っている英文を，次のア〜オから2つ選び，記号を書きなさい。
ア Audrey wanted to be an actress when she was a child, and her dream came true.
イ To practice hard to be a ballerina was a lot of fun for Audrey.
ウ Audrey visited many countries to learn about the war.
エ Much money for children was raised because Audrey appeared on TV.
オ When Audrey met "The Diary of Anne", she liked reading it at first.

■10 次の英文を読んで，【Question】について，それぞれ主語と動詞のある英文1文ずつで答えなさい。ただし，単語の数は問わない。

Audrey's family didn't live with her father when she was a little girl. So she had a sad time. But when she had a family, she loved her *husband and her children very much. Her dream is to do something for people around us.

Please think about your family. They will help you *at any time when you want them to support you.

*(注) husband 夫　at any time いつでも

【Question】
・How many people are there in your family?
・What do you usually do for your family?

正答率

| 問題4 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 問1 | 42.2% | 問2 | 50.4% | 問3 | 77.5% | 問4 | 22.0% | 問5 | 16.7% |
| | 問6 | 55.7% | 問7 | 46.8% | 問8 | 42.0% | 問9 | 40.3% | 問10 | 13.7% |

3つのポイントで、みんなの悩みを大解決!

①長野県高校入試の問題と同じ分量の実戦問題

②長野県高校入試の傾向にあわせた予想問題

③正答率をもとに、「出来なきゃいけない問題」が一目でわかる

注目! 塾生も一般生も、

1回ずつ無料体験可能!