

## **TSA Week 6 - Sunday Group**

### **Q1 (21)**

It is universally recognised that Africa's conservation tourism provides employment, generates wealth and educates future generations while saving endangered species. So we should champion tourism for the sake of conservation. Tourism in the Arctic is thus to be welcomed. As the Arctic ice melts, new shipping routes are opening up. It is unfair to characterise the presence of a large cruise ship in the Northwest Passage as 'extinction tourism' that merely indulges people who want to view endangered animals before it is too late. The tourists will return home better informed about the Arctic's fragile ecosystem.

Which one of the following best expresses the flaw in the above argument?

- A It argues a general rule on the basis of one successful example of wildlife tourism.
- B It assumes that wildlife tourists only want to see endangered animals.
- C It assumes that wildlife tourism is more important than successful conservation.
- D It assumes that the cruise-ship tourists will see enough to return home committed to the conservation of the Arctic ecosystem.
- E The argument implies that conservation tourism will inevitably lead to the extinction of some species of animal.

### **Q2 (22)**

If the vice president did act unlawfully in this matter, he would definitely have had to resign. Since we have confirmation that he has resigned, he must have broken the law.

Which one of the following most closely parallels the reasoning used in the above argument?

- A If the snake that bit this woman was a king cobra, then she would be dead by now. As she is alive and well, the snake can't have been a king cobra.
- B If the snake had yellow markings, then it was a pit viper. You say it did have yellow markings, so it must have been a pit viper.
- C If what Mahmood saw was a diamondback rattlesnake, he would have been in real danger. Since there are no rattlesnakes where Mahmood was, he was actually quite safe.
- D If a snake bite goes untreated for too long, there can be serious complications. Since I got prompt treatment, I didn't have any complications.
- E If the snake that bit this victim was venomous, then the wound would be very inflamed. We can see that there is severe inflammation, so the snake must have been venomous.

### **Q3 (23)**

It's common for people to agree in principle to socially useful projects such as the opening of centres for people with serious mental health problems. However, if the project is planned for

the area where they live, they tend to object and suggest that alternative locations would be preferable. While they approve of the general idea of such projects, they won't tolerate any negative effects on their own lives. We really don't want to go back to outdated practices of housing people with mental health problems in remote areas with no contact with the general population. So we have to accept that these projects can only work if we live near, and interact with, the people they are designed to help. Practise what you preach!

Which one of the following illustrates the principle used in the above argument?

A People who think sport has been tainted by bribery and performance-enhancing drugs should not buy tickets to sporting events.

B People who think more money should be spent on the health service should not complain when their income tax is increased to fund it.

C Parents who think too much 'screen time' is bad for young children should not buy them so many electronic gadgets.

D People who choose to be vegetarians should seek to persuade others not to eat meat or fish.

E People who have benefitted from grants or bursaries for university education should lobby for others to have the same advantages.

**Q4 (25)**

- 25 Sandi is planning a trip to the old city of Pordson. She wants to stay for four nights in order to visit all of the attractions, and one of the nights must be the Saturday so that she can attend a special music concert.

The table below shows the prices per night and details of the deals for the five main hotels in Pordson.

<i>Hotel</i>	<i>Mon</i>	<i>Tues</i>	<i>Weds</i>	<i>Thurs</i>	<i>Fri</i>	<i>Sat</i>	<i>Sun</i>	<i>Deal</i>
Grand	€60	€70	€70	€70	€50	€60	€60	3F2
Majestic	€40	€90	€70	€70	€40	€90	€40	SFSHP
Palace	€60	€90	€90	€70	€50	€90	€80	50%
Palms	€60	€80	€80	€50	€40	€60	€50	4FP3
Plaza	€70	€90	€90	€60	€50	€70	€50	CBK

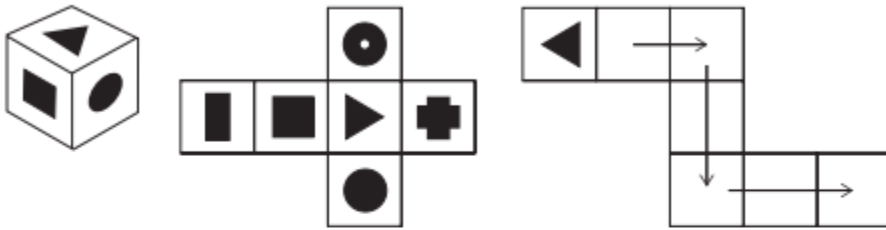
- Deals: 3F2 Stay 2 nights and get the 3<sup>rd</sup> night free  
SFSHP Stay Friday and get the Saturday night half price.  
50% 50% discount on all stays of 3 or more nights.  
4FP3 Stay 4 nights and get the cheapest night free.  
CBK €50 discount on stays of 3 or more nights.

What is the minimum that Sandi will need to spend on a hotel bill for her stay in Pordson?

- A €110
- B €120
- C €140
- D €145
- E €160

**Q5**

- 26 A solid cube has 6 different shapes drawn on each of its 6 faces. A plan view showing all the shapes is given below. It is placed on the path drawn below with the triangular shape facing up. The cube is rolled, one face at a time, forward along the route shown, from start position until it reaches the end position.



Which one of the following shapes is facing up when it reaches the end position?

A



B



C



D



E



**Q6**

- 30 Alex and Sue are playing a game with a set of nine cards, numbered from 1 to 9. A  $3 \times 3$  grid of cards is dealt onto the table. The cards for the next round have just been dealt and are as shown below.

5	1	8
3	6	2
9	7	4

The first player chooses two cards and scores the difference between the two numbers. The second player then chooses two cards from the seven that are left and scores the average of the two numbers. The highest score wins the round. Both players must choose cards that are either horizontally or vertically next to each other in the grid.

For this round of the game Alex has to decide whether to play first or second. She wants to make sure that she wins the round. If she has more than one possible winning move then she wants to achieve the highest score possible.

What should Alex choose to do?

- A play first and choose the 1 and 8
- B play first and choose the 3 and 9
- C play first and choose the 6 and 7
- D play first and choose the 7 and 9
- E play second

**Q7 (31)**

- 31** The single ferry to Pepper Island starts each day from mainland Seatown and crosses to the island port of Kaysville. It runs back and forth from 9:30 am to 4:10 pm on Saturdays, Sundays and Bank Holidays, and from 10:30 am to 2:20 pm from Monday to Friday.

MAY						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

highlighted days = Bank Holidays

Each crossing takes 50 minutes. Between crossings, there is a 10-minute stopover for cleaning and refuelling. This is extended to 20 minutes on Saturdays, Sundays and Bank Holidays to allow for the increased cleaning requirements.

What is the maximum number of crossings the ferry can make in May?

- A 140
- B 144
- C 154
- D 166
- E 186

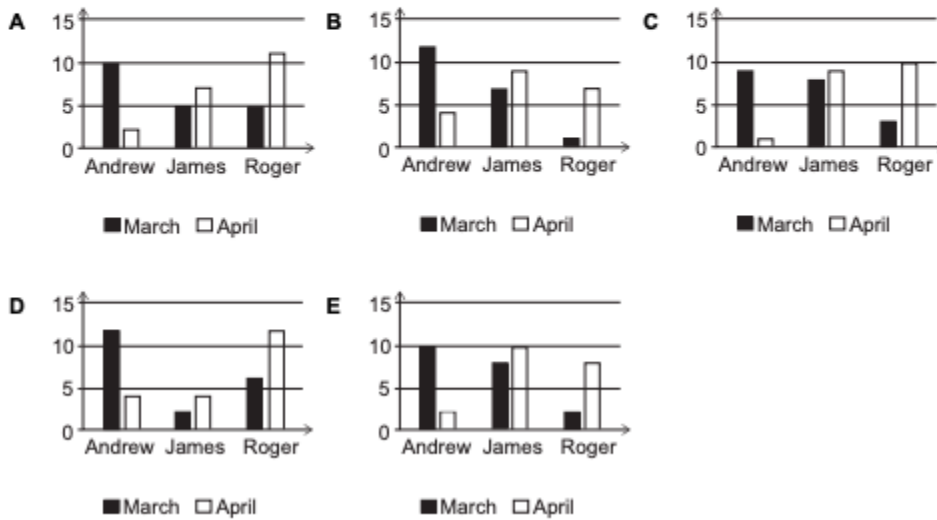
**Q8**

- 32** In March, 20 people voted for the position of chair of a committee. There were three potential candidates: Andrew, James and Roger.

In April, 11 of these people changed their votes, as follows:

- 3 people changed their vote from Andrew to James
- 2 people changed their vote from James to Roger
- 5 people changed their vote from Andrew to Roger
- 1 person changed their vote from Roger to James

Which one of these bar charts could **not** show the number of votes for the three candidates in March and April?



**Q9**

- 37 Arthur plans to modernise his bathroom. His design requires a 1600 mm × 700 mm bath. He wants side grips to help him get out of the bath, and because he doesn't want to choose the taps before ordering the bath he must have one which doesn't have pre-drilled tap holes.

A list from the bath catalogue is shown below:

<i>name</i>	<i>material</i>	<i>length</i>	<i>width</i>	<i>height</i>	<i>side-grips</i>	<i>pre-drilled tap holes</i>	<i>price (£)</i>
Balmoral	acrylic	1600	750	590	yes	no	159
Carola	acrylic	1600	700	610	yes	no	130
Dalton	steel	1600	700	580	no	no	112
Europa	steel	1600	700	590	yes	no	126
Gamma	steel	1600	700	580	yes	yes	135
Oporto	acrylic	1600	700	585	no	no	115
Polar	steel	1500	700	600	yes	no	120
Rocca	acrylic	1600	700	590	no	no	126
Sierra	steel	1600	700	580	yes	no	128
Victory	acrylic	1600	700	580	yes	no	149

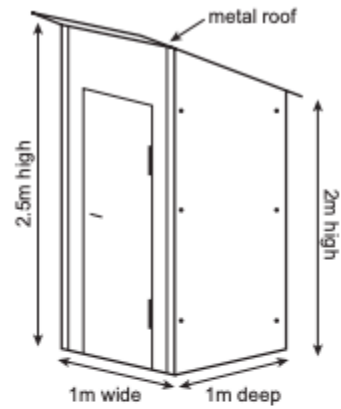
How much will Arthur save by choosing the cheapest steel bath that fits his requirements rather than the cheapest acrylic bath that fits his requirements?

- A £2
- B £3
- C £4
- D £10
- E £18



**Q10**

42 The drawing below shows an allotment shed.



[diagram not to scale]

The four outside wood surfaces of the shed, including the door, need to be painted with three coats of paint. It takes 4 minutes to paint 1 square metre.

I have two identical sheds to paint and will take just one 20-minute tea break.

How long will it take to paint the two sheds?

- A 36 minutes
- B 1 hour and 48 minutes
- C 2 hours and 8 minutes
- D 3 hours and 36 minutes
- E 3 hours and 56 minutes

### Q11

- 43 A school party consisting of 4 teachers and 20 students is visiting the theatre. Of the students, 8 are aged 15 years and 12 are aged 16 years. The following table shows the entry prices to the theatre.

<i>category</i>	<i>price</i>
Adult (16 years and over)	\$30
Child (5–15 years)	\$20
Under 5 years	free
Family ticket (2 adults and up to 2 children under 16 years)	\$90
Group ticket (8 people including at least 2 children under 16 years)	\$175
Supergroup ticket (any 8 people)	\$200

What is the least amount that the school party must pay for entry to the theatre?

- A \$525
- B \$530
- C \$545
- D \$550
- E \$560

### Q12

What one subject should we teach students in school which is not currently on the curriculum?

### Q13

Giving £10 to a charity will save a child from preventable illness in South Sudan.

Saving a child I see drowning as I walk through the park will cost me £10 in ruined clothes.

What, if any, moral difference is there between the two?