

NO.	ANSWER																				
1	<p>Initial positions: Calculator - Black Ballpen - Highlighter - Laptop - Pad Paper - Red Marker</p> <p>Reversed positions: Red Marker - Pad Paper - Laptop - Highlighter - Black Ballpen - Calculator</p> <p>Since there are six items, the centre will be positions 3 and 4, which are the positions of the laptop and the highlighter.</p> <p>Position 3 - Highlighter Position 4 - Laptop</p> <p>When reversed</p> <p>Position 3: Laptop Position 4: Highlighter</p> <p>Option D is the correct answer.</p>																				
2	<p>Sandra's car speed: 75km/h Meredith's car speed: 60km/h</p> <p>When Sandra arrived at the ramen house she has travelled $150\text{km} / 75\text{km/hr} = 2 \text{ hours}$</p> <p>Meredith will take $150\text{km} / 60\text{km/hr} = 2.5 \text{ hours}$ to reach the ramen house</p> <p>$2.5 \text{ hours} + 2 \text{ hours} = 4.5 \text{ hours}$</p> <p>$4.5 \text{ hours} \times 60\text{mins} / 1 \text{ hour} = 270 \text{ minutes}$</p> <p>It will take 270 minutes for Meredith to get to the ramen house. Option C is the correct answer.</p>																				
3	<p>Since Mica wants the mini stuffed toy, small perfume, and bubbles, she can no longer choose the marker set because it is in the same list as the small perfume. Both the marker set and the small perfume are exclusively found in list 1, which means only one between the two can be chosen by Mica.</p> <table><tr><th>LIST 1</th><th>LIST 2</th><th>LIST 3</th><th>LIST 4</th></tr><tr><td>Marker Set</td><td>Mini Stuffed Toy</td><td>Mini Stuffed Toy</td><td>Bracelet</td></tr><tr><td>Lollies</td><td>Bracelet</td><td>Lollies</td><td>Bubbles</td></tr><tr><td>Small Perfume</td><td>Slime</td><td>Bubbles</td><td>Chocolate Bar</td></tr><tr><td>Chocolate Bar</td><td>Kinetic Sand</td><td>Stickers</td><td>Stickers</td></tr></table> <p>Option B is the correct answer.</p>	LIST 1	LIST 2	LIST 3	LIST 4	Marker Set	Mini Stuffed Toy	Mini Stuffed Toy	Bracelet	Lollies	Bracelet	Lollies	Bubbles	Small Perfume	Slime	Bubbles	Chocolate Bar	Chocolate Bar	Kinetic Sand	Stickers	Stickers
LIST 1	LIST 2	LIST 3	LIST 4																		
Marker Set	Mini Stuffed Toy	Mini Stuffed Toy	Bracelet																		
Lollies	Bracelet	Lollies	Bubbles																		
Small Perfume	Slime	Bubbles	Chocolate Bar																		
Chocolate Bar	Kinetic Sand	Stickers	Stickers																		

4

NAME	CHILD	PROFESSION
Jasper	Mico	Mailman
Marcus	Francis	Architect
Omar	Eleandre	Chef

Based on the table, it can be concluded that Mico's father is a mailman. **Option C is the correct answer.**

5

NAME	COUNTRY	MOVIE GENRE
Eli	China	Comedy
Ana	Singapore	Horror
Mari	Malaysia	Thriller
Ping	Canada	Drama

Based on the given conditions, the table above can be created. With the table, it can be concluded that the statement in option C is correct. Ping likes drama. **Option C is the correct answer.**

6

- The sedan is placed before the sportscar, and is placed 4th.
= Sedan is placed 4th, the Sports car is placed 5th.
- The minivan is not placed first or third.
= The minivan is placed 2nd.
- The convertible is placed first.
- A minimum of one vehicle is placed after the sedan and before the van.
= The van is placed 6th.

The order of the vehicles go Convertible > Minivan > SUV > Sedan > Sports Car > Van.

The vehicle directly before the sedan is the SUV. **Option D is the correct answer.**

7

Marina's car speed: 60km/h
Krielle's car speed: 120km/h
Time: 2 hours
Distance: 120

Total time taken by Krielle to overtake Marina from 1 PM (Dist / Speed) = $120 / 60 = 2$
11 AM + 2 hours + 2 hours = 4 hours
4 hours after 11 AM is 3 PM.
Krielle passed Marina at 3 PM.

Option B is the correct answer.

8

NAME	HOBBY	COLLEGE PROGRAM
Alisa	Crocheting	Nursing
Brian	Cooking	Architecture
Jerome	Painting	Tourism

Based on the table, it can be concluded that Jerome’s hobby is painting. **Option C is the correct answer.**

9

Jonathan’s first two choices are Japan and Malaysia, hence, he can no longer choose Canada. Although Canada is present in both lists 2 and 3, Malaysia and Japan are exclusively under the said lists, respectively.

List 1	List 2	List 3
Hong Kong	Malaysia	Canada
Singapore	Philippines	Singapore
Thailand	Canada	Japan
Philippines	Hong Kong	Thailand

Therefore, option C is the correct answer.

10

Vehicle 1’s speed: 50km/h
Vehicle 2’s speed: 30km/h
Distance = 80km
 $= (50\text{km/h}) t + (30\text{km/h}) t = 80 \text{ km}$
 $= (80\text{km/h}) t = 80\text{km}$
 $t = 1 \text{ hour}$

The two vehicles will meet after 1 hour. **Option B is the correct answer.**

11

NAME	SPORT	TALENT
Eddie	Basketball	Singing
Alisa	Volleyball	Dancing
Laurel	Swimming	Crocheting
Jack	Soccer	Painting

Plotted in the table are the given information in the conditions. It can be concluded that Jack is good at painting. **Option D is the correct answer.**

12 From the rules given, the teams were dressed in the following colours:

TEAM	SHIRT COLOUR	SHOE COLOUR
Team Alpha	Green	Orange
Team Bravo	White	Peach
Team Charlie	Peach	Green
Team Delta	Purple	White
Team Echo	Orange	Purple

It is true that Team Charlie wore green shoes. **Option C is the correct answer.**

13

NAME	PLACE	ACTIVITY
Franco	Beach	Parasailing
Lesley	Ocean Park	See the sea animals
Valentina	Disney World	Take pictures with the Disney princesses
Lance	Farm	Feed the farm animals

Based on the given information, the table was formed. It can then be concluded that Valentina wants to take pictures with the Disney princesses.

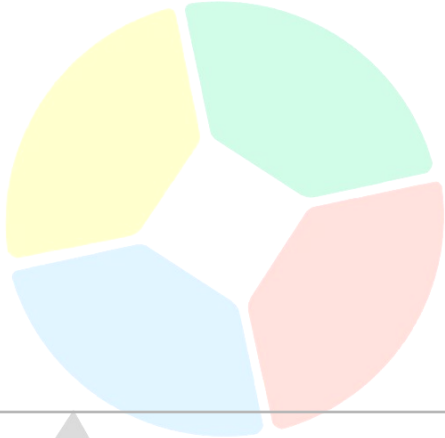
Option B is the correct answer.

14

Since her grandmother chose Tiramisu and Mango, it means that she can no longer choose the Marble flavour because it is in the same list as Tiramisu and Mango. Both flavours are not available in any other lists.

List 1	List 2	List 3
Red Velvet	Tiramisu	Marble
Chocolate	Chiffon	Chocolate
Carrot	Marble	Mango
Chiffon	Red Velvet	Carrot

Option A is the correct answer.

15	<p>Given: Car 1's speed: 45km/h Car 2's speed: 35km/h Distance = 100 km</p> <p>Solution: Time = Distance / Speed $D = Vt$ $45(t) + 35(t) = 100$ $t = 100/80$ $t = 1.25$ hours or 1 hour 15 mins</p> <p>Option D is the correct answer.</p> 
16	<ul style="list-style-type: none"> - Ping won the game, but Fyke is not far behind. = Ping finished first and Fyke finished 2nd. - Greg did not beat Vince. = Vince finished second to the last. - Austine and Josh both failed to beat Ken but were able to beat Harvey. = Austine and Josh are in 4th and 5th place, Harvey is in 6th place and Ken is 3rd place. - Harvey is faster than Vince. = Harvey is in 6th place. <p>The order goes Ping > Fyke > Ken > Austine > Josh > Harvey > Vince > Greg</p> <p>Greg finished last. Option D is the correct answer.</p>
17	<p>The order of the toys goes Ball > Rubber Duck > Aeroplane > Car</p> <p>The rubber duck comes second from the left. Option A is the correct answer.</p>
18	<ul style="list-style-type: none"> - Astrid's check-up session is after Caleb's session. = Astrid is 3rd, Caleb is 2nd - Shanaia's check-up session is either first or last. = Shanaia is last - Chels' check-up session begins right after Roda's check-up session. = Chels is 5th, Roda is 4th - Either Caleb or Astrid must be scheduled for the third check-up session. = Astrid is 3rd <p>Kristoff > Caleb > Astrid > Roda > Chels > Shanaia</p> <p>It is true that Caleb's check-up session is 2nd.</p> <p>Option C is the correct answer.</p>

19

Lisa wants the cake rotating table, mixing bowl and muffin holder, therefore she can no longer choose the pipping set because it is on the same list as the mixing bowl and the mixing bowl is not on any of the other lists.

LIST 1	LIST 2	LIST 3	LIST 4
Pipping Set	Cake Rotating Table	Cake Rotating Table	Cookie Cutter
Egg Separator	Cookie Cutter	Egg Separator	Muffin Holder
Mixing Bowl	Measuring Cups	Muffin Holder	Rolling Pin
Rolling Pin	Baking Spatula	Dough Smoother	Dough Smoother

Option D is the correct answer.

20

Angel's car speed: 50km/h

Gerald's car speed: 80km/h

Time: 1 hour

Distance between Angel and Gerald = 50

Total time taken by Gerald to overtake Angel from 8 AM (Dist / Speed) = $50 / 80 = 1.67$ hours

7AM + 1 hour + 1 hour and 40 minutes = 2 hours and 40 minutes

2 hours and 40 minutes after 7 AM is 9:40 AM.

Gerald will overtake Angel at 9:40 AM.

Option A is the correct answer.

21

The information in the given conditions were plotted in the table.

NAME	PLACE	CAMERA
Gabby	Japan	DSLR
Sharon	Korea	Instant
Kyle	Philippines	Telephoto
Zoie	Canada	Wide-angle

It can be concluded that Gabby wants to go to Japan.

Option C is the correct answer.

22	<p>24 of the 27 students who like hiphop could have also liked ballet, as there is no indication that stops them from doing both.</p> <p>$48 - 27 = 21$</p> <p>The maximum number of students who could have liked neither of the two types of dance is 21.</p> <p>Option A is the correct answer.</p>																				
23	<p>Jessica's speed: 40km/h Linda's speed: 40km/h Distance = 80 km $= (40\text{km/h}) + (40\text{km/h}) \ t = 80\text{km}$ $= (80 \text{ km/h}) \ t = 80\text{km}$ $t = 1 \text{ hour}$</p> <p>Jessica and Linda will meet after 1 hour.</p> <p>Other Solution:</p> <p>Given: Distance = 80 km ← Total distance Jessica = 40km/h Linda = 40 km/h $V = D / t$ $D = Vt$</p> <p>$40t + 40t = 80$ $t = 80/80 = 1 \text{ hour}$</p> <p>Option B is the correct answer.</p>																				
24	<p>Chelsea wants to choose Sundress, A-line, and Empire Waist. She can also choose the Polo type of dress because she has not chosen anything from list 2 yet.</p> <table><tr><th><u>List 1</u></th><th><u>List 2</u></th><th><u>List 3</u></th><th><u>List 4</u></th></tr><tr><td>A-line</td><td>Polo</td><td>Empire Waist</td><td>Bodycon</td></tr><tr><td>Empire Waist</td><td>Strapless</td><td>Maxi</td><td>A-line</td></tr><tr><td>Sundress</td><td>Bodycon</td><td>Wrap</td><td>Halter</td></tr><tr><td>Bodycon</td><td>Peplum</td><td>Sundress</td><td>Maxi</td></tr></table> <p>Option C is the correct answer.</p>	<u>List 1</u>	<u>List 2</u>	<u>List 3</u>	<u>List 4</u>	A-line	Polo	Empire Waist	Bodycon	Empire Waist	Strapless	Maxi	A-line	Sundress	Bodycon	Wrap	Halter	Bodycon	Peplum	Sundress	Maxi
<u>List 1</u>	<u>List 2</u>	<u>List 3</u>	<u>List 4</u>																		
A-line	Polo	Empire Waist	Bodycon																		
Empire Waist	Strapless	Maxi	A-line																		
Sundress	Bodycon	Wrap	Halter																		
Bodycon	Peplum	Sundress	Maxi																		

25	<p>Chick-Fil-A is the fifth one from the left. = ____ Chick-Fil-A _</p> <p>KFC is to the right of Chick-Fil-A. = ____ Chick-Fil-A - KFC</p> <p>Taco Bell is to the right of Jollibee. = Jollibee - Tacobell</p> <p>Pizza Hut is on the immediate left of the Taco Bell. = Jollibee - Pizza Hut - Tacobell</p> <p>McDonald's is on the immediate left of Jollibee. = McDonald's - Jollibee - Pizza Hut - Tacobell</p> <p>McDonald's - Jollibee - Pizza Hut - Tacobell - Chick-Fil-A - KFC</p> <p>Option D is the correct answer.</p>																				
26	<p>The sixth number is 3. = ____ 3</p> <p>The fourth, fifth, and sixth numbers are in consecutive and increasing order. ____ 1 2 3</p> <p>The third number is thrice the sixth number. = __ 9 1 2 3</p> <p>By subtracting the first number from the third number, you will get the fifth number = 7 _ 9 1 2 3</p> <p>By adding 1 to the first number, you will get the second number. = 7 8 9 1 2 3</p> <p>The first digit is 7.</p> <p>Option A is the correct answer.</p>																				
27	<p>Manila to Singapore = 7 AM to 9 AM</p> <p>Waiting time = 9 - 10 AM</p> <p>Singapore to Dubai = 10 AM to 5:45 PM</p> <p>Waiting time = 15 minutes</p> <p>Dubai to Los Angeles = 6 PM to 6:15 PM</p> <p>Olive arrived at 6:15 in Los Angeles. Option C is the correct answer.</p>																				
28	<p>Marco chose apple, grapes, and dragon fruit. He can no longer choose mango because it is on the same list as the apple, and apple is not on the other option sets.</p> <table><tr><th><u>Set 1</u></th><th><u>Set 2</u></th><th><u>Set 3</u></th><th><u>Set 4</u></th></tr><tr><td>Apple</td><td>Pear</td><td>Grapes</td><td>Mulberry</td></tr><tr><td>Grapes</td><td>Dragon Fruit</td><td>Watermelon</td><td>Melon</td></tr><tr><td>Mango</td><td>Watermelon</td><td>Orange</td><td>Orange</td></tr><tr><td>Banana</td><td>Melon</td><td>Kiwi</td><td>Pear</td></tr></table> <p>Option C is the correct answer.</p>	<u>Set 1</u>	<u>Set 2</u>	<u>Set 3</u>	<u>Set 4</u>	Apple	Pear	Grapes	Mulberry	Grapes	Dragon Fruit	Watermelon	Melon	Mango	Watermelon	Orange	Orange	Banana	Melon	Kiwi	Pear
<u>Set 1</u>	<u>Set 2</u>	<u>Set 3</u>	<u>Set 4</u>																		
Apple	Pear	Grapes	Mulberry																		
Grapes	Dragon Fruit	Watermelon	Melon																		
Mango	Watermelon	Orange	Orange																		
Banana	Melon	Kiwi	Pear																		
29	<p>Caleb's speed: 60km/h</p> <p>Marco's speed: 80km/h</p> <p>Time: 2 hours</p> <p>Distance between Caleb and Marco = 120km</p> <p>Time = (Dist / Speed) = 120km / 20 = 6</p> <p>7AM + 2 hours + 6 hours = 8 hours</p> <p>8 hours after 7 AM is 3 PM. Marco will overtake Caleb at 3 PM. Option D is the correct answer.</p>																				

30

The first digit is 8. = 8 _ _ _ _ _

The third digit is the result after dividing the first digit by 2. = 8 _ 4 _ _ _ _

By adding 1 to the third digit, you will get the second digit. = 8 5 4 _ _ _

The sixth digit is twice the third digit. = 8 5 4 _ _ 8

By subtracting the fourth digit from the second digit, you will get the fifth digit. The fourth digit should be equal to or greater than the second digit in order for you to get a positive number. The only option with a number that satisfies that is option B. 8 5 4 6 1 8

The fourth digit is 6.

Other solution:

Given:

6 digit code

1st = 8

3rd + 1 = 2nd

4th - 2nd = 5th

6th = 2(3rd)

3rd = 1st/2

Solution:

3rd = $8/2 = 4$

6th = $2(3rd) = 2(4) = 8$

2nd = $3rd + 1 = 4 + 1 = 5$

Therefore we already have 8 5 4 _ _ 8

4th - 2nd = 5th

4th - 5 = 5th

Therefore 4th should be greater than 5

Choice B is the only digit higher than 5

Option B is the correct answer.

31

LETTER	KEY	KEY LETTERS	NO. OF PRESSES
S	7	P Q R S	4
H	4	G H I	2
A	2	A B C	1
K	5	J K L	2
I	4	G H I	3
R	7	P Q R S	3
A	2	A B C	1
H	4	G H I	2

KEY	TOTAL NO. OF PRESSES
7	7
4	7
5	2
2	2

Option A is the correct answer.

32

The bricks could NOT form the following words since they do not use all the bricks:

HELPERS - 615342

SHIVERS - 46512




DREAMED - 15423


Only the word SUPPORT can be spelt with all of his bricks.

SUPPORT - 1234567

Option D is the correct answer.

33

Because there is no direct way to find out what each symbol stands for, the answer can instead be determined by identifying how and when the symbol appears. In the given example code for "Barbara", the symbols also repeat:  appears where B would in the name,  appears where A would, and  is written in place of the R.

In the second code, observe how the symbol  appears alternately after a unique symbol. Canada is the only country listed in the choices where a letter appears alternately with others.

Therefore, A is the correct answer.

34

The code is a variation on a substitution code. A letter is encoded as the following letter in the alphabet when it first occurs in a message (A becomes B, Z becomes A). On each subsequent appearance, it becomes the next letter again (A becomes C, Z becomes B).

H - I

A - B

P - Q

P - R

Y - Z

B - C

I - J

R - S

T - U

H - J

D - E
A - C
Y - A

Bella Rey should encode the message as IBQRZ CJSUJECA. **Option B is the correct answer.**

35 The code is WBV.

9 positions before W is N and 9 positions after W is F.
9 positions before B is S and 9 positions after B is K
9 positions before V is M and 9 positions after V is E.

The possible letters are N,F,S,K,M, and E. NSE is a possible original abbreviation. **Option A is the correct answer.**

36 In their code, each letter in the alphabet is assigned with a number where number 1 is assigned to letter A, number 2 for letter B, and so on up until letter Z. For every subsequent letter, the assigned number for that specific letter is multiplied by 2.

T	A	B	L	E
$20 \times 2 = 40$	$1 \times 2 \times 2 \times 2 = 8$	2	12	5

Therefore, the word TABLE should be written as 4082125.

Option C is the correct answer.

37 The first character of the code is the fourth letter of the word starting from the right.

The second character of the code is the number of letters of the word and whether this number is odd or even:
for even @ for odd

The third character of the code is the number of vowels.

Example: Beautiful is coded as i@5.

The word NERVOUS has the letter "v" as its fourth letter from the right. It has 7 letters, which is an odd number, thus the second character is "@". Then it has three vowel letters, thus "3" is the third character.

Thus, the code for the word NERVOUS is v@3. **Option A is the correct answer.**

38 The given choices can be decoded as follows:

- A. NYYBJ - ALLOW
- B. NXXBK - AKKOW
- C. BYYPX - OLLLCK
- D. NBBPK - AOOCX

Therefore, A is the correct answer.

39

LETTER	CODE	LETTER	CODE
I	100001	B	101111
N	100100	E	001001
S	010101	A	011001
T	101010	D	001100
E	001001	S	010101
A	011001		
D	001100		

The code for BEADS should be 101111 001001 011001 001100 010101. **Option B is the correct answer.**

40

Letters	Code	
	For Odd Positions	For Even Positions
A	V	Z
B	W	Y
C	X	X
D	Y	W
E	Z	V
F	A	U
G	B	T
H	C	S
I	D	R
J	E	Q
K	F	P
L	G	O
M	H	N
N	I	M
O	J	L
P	K	K
Q	L	J
R	M	I
S	N	H
T	O	G
U	P	F
V	Q	E
W	R	D
X	S	C
Y	T	B
Z	U	A

Based on the code patterns shown above, which were applied in the problem's example, the word JUMP should be written as EFHK. **Option A is the correct answer.**