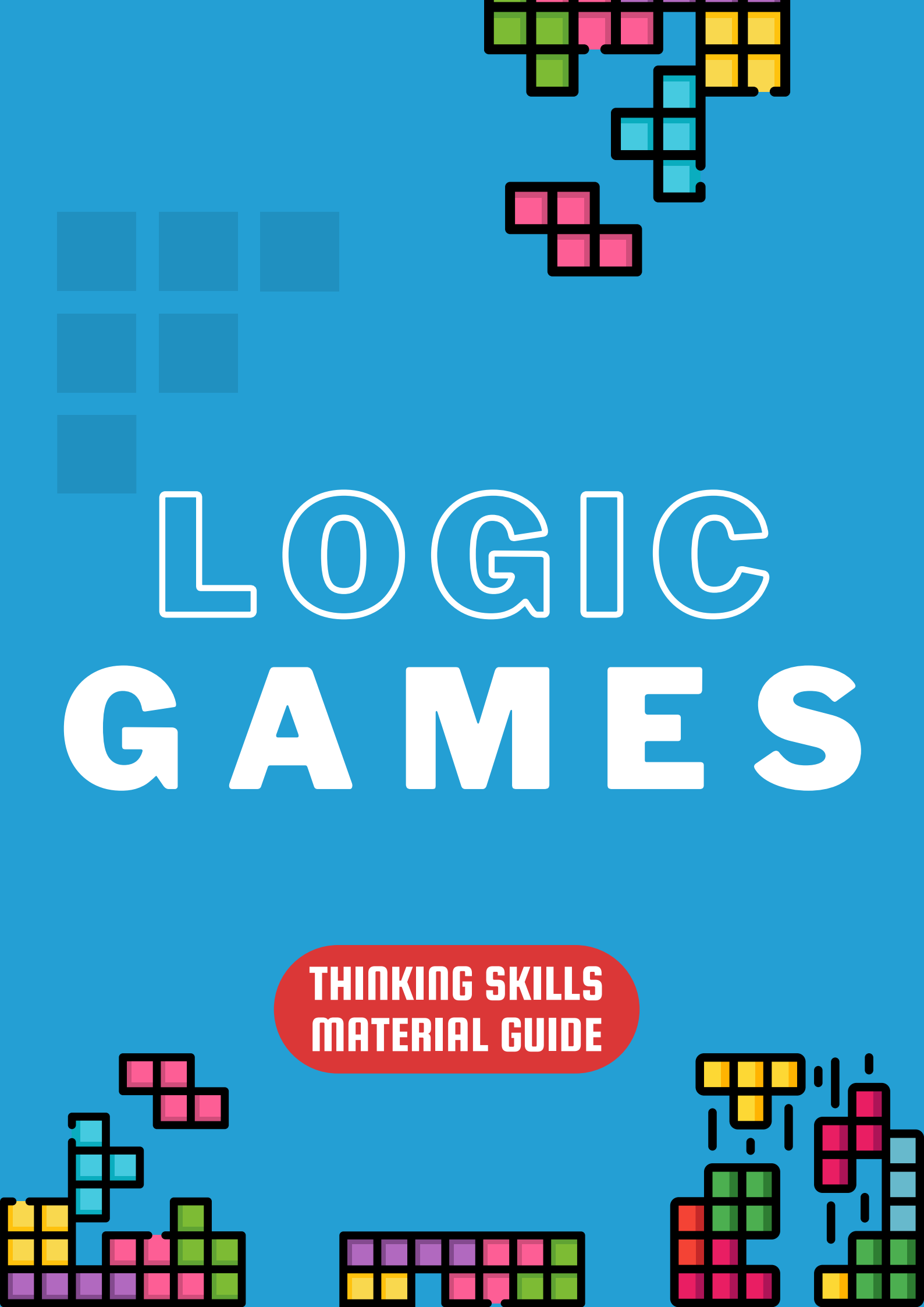
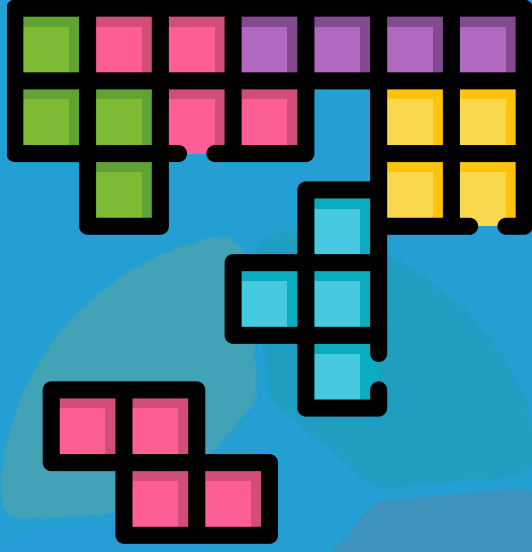
LOGIC GAMES

THINKING SKILLS MATERIAL GUIDE



DIGIT GAMES



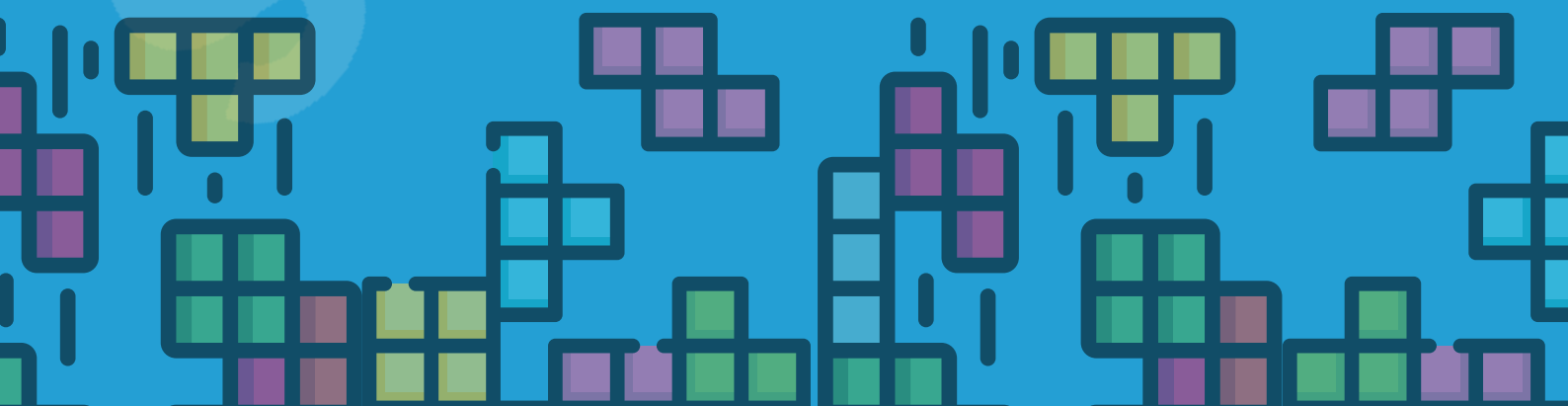
DIGIT GAMES ARE QUESTIONS THAT REQUIRE YOU TO FIGURE OUT A PINCODE FOR A GIVEN SET.

EXAMPLE:

I HAVE A 6-DIGIT CODE FOR MY EMAIL VERIFICATION.
THE FIRST 2 DIGITS EQUAL THE FOURTH NUMBER WHEN MULTIPLIED BY 5.
THE LAST 2 DIGITS EQUAL TO THE PRODUCT OF THE MIDDLE 2 DIGITS DECREASED BY 12.
THE THIRD NUMBER IS 9 AND ALL DIGITS ARE ODD AND DIFFERENT.

WHAT ARE THE LAST TWO DIGITS OF MY AUTHENTICATION CODE?

A. 63
B. 45
C. 51
D. 35



GUESS THE TIME

"GUESS THE TIME" QUESTIONS ARE ONES THAT INVOLVE DISTANCE, RATE, AND TIME TO FIND THE ANSWER.

EXAMPLE:

THE DISTANCE BETWEEN MCDONALD'S AND KFC IS 60KM. TWO TRUCKS AT THE SAME TIME START MOVING FROM TWO ENDS WITH THE SPEED OF 35 KM/H AND 25 KM/H RESPECTIVELY. IF BOTH TRUCKS ARE MOVING TOWARDS EACH OTHER, AFTER HOW MUCH TIME WILL THEY MEET?

A. 1 HOUR
B. 1 HOUR 15 MINS.
C. 2 HOURS
D. 3 HOURS 15 MINS.

EXPLANATION:

TRUCK 1 SPEED: 35 KM/H
TRUCK 2 SPEED: 25 KM/H

DISTANCE:
D1 + D2 = 60 KM

(35KM/H) T + (25KM/H) T = 60KM
(60KM/H) T = 60KM
T = 1 HOUR

THEREFORE, THE TWO TRUCKS WILL MEET AFTER 1 HOUR.

LYING/TRUTH VALIDITY

THESE QUESTIONS ARE SIMPLY TO FIGURE OUT WHO'S LYING OR NOT.

EXAMPLE:

ELIZABETH, TOGETHER WITH HER FOUR CHILDREN, RHEA, ROGER, REGINE AND RAYNE, WENT OUT ON AN OVERNIGHT VACATION IN A VILLA. THEY USED THEIR FAMILY CAR IN ORDER TO GO TO THE VILLA. THE NEXT MORNING, ELIZABETH FOUND OUT THAT THEIR FAMILY CAR HAD A SCRATCH IN ITS FRONT BUMPER. ELIZABETH HAS NOT DRIVEN THE CAR EVER SINCE THEIR ARRIVAL, SO SHE SUSPECTED THAT HER CHILDREN MIGHT HAVE USED THE CAR AND CAUSED THE ACCIDENT. ONLY ONE OF THE CHILDREN HAS DRIVEN THE CAR. AFTER FINDING OUT THE CULPRIT, SHE ALSO FOUND OUT THAT 3 OF HER CHILDREN WERE LYING.

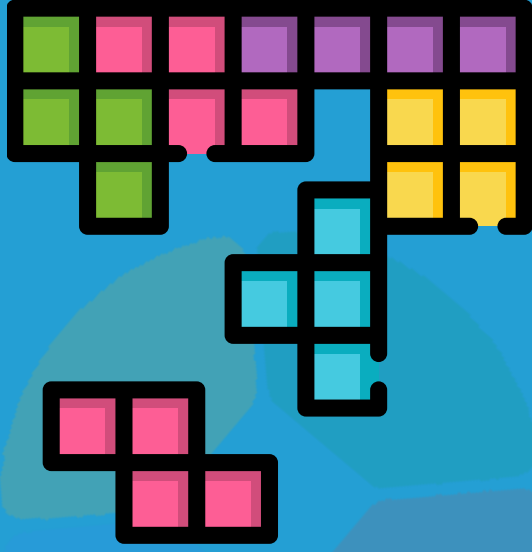
RHEA: RAYNE DROVE THE CAR. HE IS ALWAYS THE ONE CAUSING TROUBLE.
ROGER: I DID NOT DRIVE THE CAR. I WAS PLAYING CARDS.
REGINE: I DROVE THE CAR. IT WAS MY FAULT.
RAYNE: I DID NOT DRIVE THE CAR.

WHICH AMONG THE CHILDREN WENT OUT AND DROVE THE CAR?

1. RHEA
2. ROGER
3. REGINE
4. RAYNE

LYING/TRUTH VALIDITY

THESE QUESTIONS ARE SIMPLY TO FIGURE OUT WHO'S LYING OR NOT.



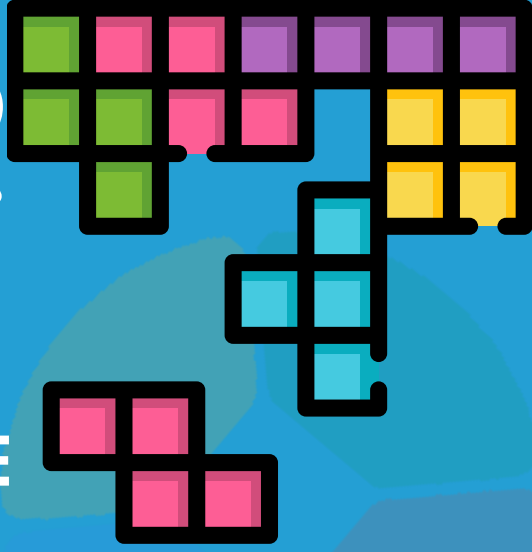
EXPLANATION:

BY CONSIDERING ALL POSSIBLE SCENARIOS BASED ON THE GIVEN TESTIMONIES OF HER CHILDREN:

		LYING			CONDITION:
IF GUILTY		TRUTH			1 GUILTY, 3 LYING
Rhea		Rhea	Roger	Regine	Rayne
Roger		Rhea	Roger	Regine	Rayne
Regine		Rhea	Roger	Regine	Rayne
Rayne		Rhea	Roger	Regine	Rayne

IT WAS FOUND THAT THE SCENARIO WHERE ROGER WAS GUILTY FITS THE GIVEN CONDITION WHERE ONE IS GUILTY AND THREE ARE LYING. THUS, ROGER WAS THE ONE WHO DROVE THE CAR AND CAUSED THE SCRATCH

NUMBER GAMES



THESE ARE QUESTIONS THAT INVOLVE SIMPLE ARITHMETIC TO FIND THE ANSWER.

EXAMPLE:

AN OCTOPUS HAS A TOTAL OF 8 TENTACLES. A FISHERMAN CAUGHT 10 OCTOPUSES TODAY AND SOLD 5 OCTOPUSES. YESTERDAY, THE FISHERMAN CAUGHT A TOTAL OF 128 TENTACLES BUT ONLY 32 TENTACLES WERE SOLD. WHAT IS THE TOTAL NUMBER OF OCTOPUSES SOLD?

A. 7
B. 8
C. 9
D. 12

EXPLANATION:

WE KNOW THAT:

YESTERDAY, 16 OCTOPUSES WERE CAUGHT AND 4 WERE SOLD. TODAY, 10 OCTOPUSES WERE CAUGHT AND 5 WERE SOLD. TO GET THE TOTAL NUMBER OF OCTOPUSES SOLD, ADD 5 AND 4. THE TOTAL NUMBER OF OCTOPUSES SOLD IS 9.

OPTION C IS THE CORRECT ANSWER.

ROLL OF DICE

"ROLL OF DICE" QUESTIONS ARE THE ONES THAT INVOLVES DICE

EXAMPLE:

LILY AND HANNAH ATTENDED A BIRTHDAY PARTY AND GOT 50 CANDIES EACH

HANNAH'S 5-YEAR-OLD BROTHER NATHAN WANTED TO HAVE SOME BUT HANNAH IS HESITANT ABOUT IT. SO THEN LILY CAME UP WITH THE IDEA OF ROLLING DICE SO THAT THEY CAN SHARE THEIR CANDIES WITH NATHAN. THEY TAKE TURNS TO ROLL

- IF IT IS AN EVEN NUMBER, THEN LILY WILL RECEIVE 10 CANDIES FROM HANNAH.
- IF IT IS AN ODD NUMBER, THEN HANNAH WILL GIVE THE NUMBER OF CANDIES SHOWN ON THE FACE OF THE DICE PLUS FIVE TO NATHAN

LILY ROLLS 4
HANNAH ROLLS 1

LILY GAVE 10 CANDIES TO NATHAN ALONG WITH ALL THE CANDIES THAT HANNAH GAVE TO HER.

HOW MANY CANDIES DID HANNAH LOSE?

A. 26
B. 16
C. 40
D. 6

ROLL OF DICE

"ROLL OF DICE" QUESTIONS ARE THE ONES THAT INVOLVES DICE

EXPLANATION:

BY MAPPING OUT THE CONDITIONS OF THE GAME WE GET THE FOLLOWING QUANTITIES OF CANDIES EACH PERSON HAS.

ROLLING A 4, HANNAH GIVES 10 CANDIES TO LILY.

ROLLING A 1. HANNAH GIVES 6 CANDIES TO NATHAN.

THEN LILY GIVES 10 CANDIES TO NATHAN.

THEREFORE, THE ALLOCATED CANDIES AT THE END ARE AS FOLLOWS.

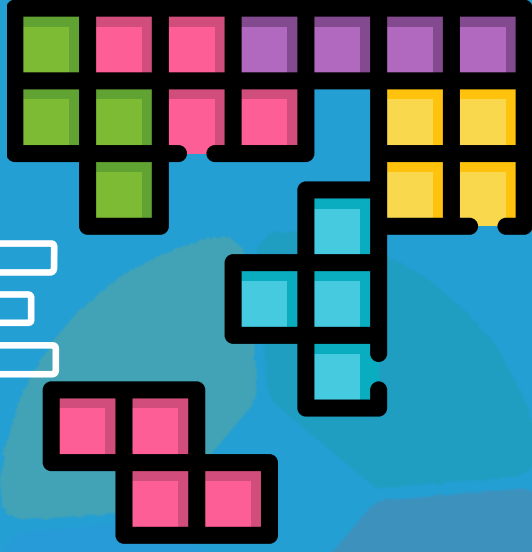
LILY - 50 CANDIES.

HANNAH - 34 CANDIES.

NATHAN - 16 CANDIES.

THEREFORE, THE CORRECT ANSWER IS B AS HANNAH HAS GIVEN AWAY 16 CANDIES.

SECRET MESSAGE



IN THIS QUESTION TYPE, EVERY LETTER OF THE ALPHABET IS REPRESENTED BY A ONE-DIGIT NUMBER THAT IS USED TO DECODE A MESSAGE.

EXAMPLE:

RJ AND LEA WANT TO USE A CODE TO SEND SECRET MESSAGES TO EACH OTHER. IN THE CODE, EACH LETTER OF THE ALPHABET IS REPRESENTED BY ONE-DIGIT NUMBER AS FOLLOWS:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2	3	5	8	7	9	0	4	6	2	5	4	3	2	1	1	0	9	1	8	4	7	0	3	6	1

FOR EXAMPLE THE WORD BELL WOULD BE WRITTEN IN THE CODE 3-7-4-4.

TO TEST THE SYSTEM, RJ WRITES FOUR WORDS ABOUT THE KITCHEN IN THE CODE AND SENDS THEM TO LEA. LEA TRIES TO DECODE THEM AND GETS THE FOLLOWING ANSWERS:

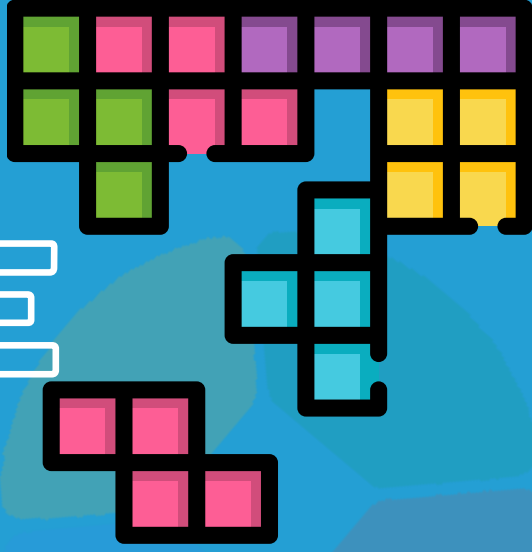
CHOP , FORK , DISH , COOK

LEA IS CONFIDENT SHE HAS 3 OF THESE WORDS CORRECT, BUT SHE IS UNSURE ABOUT THE OTHER ONE.

WHICH WORD IS LEA UNSURE ABOUT?

1. CHOP
2. FORK
3. DISH
4. COOK

SECRET MESSAGE



IN THIS QUESTION TYPE, EVERY LETTER OF THE ALPHABET IS REPRESENTED BY A ONE-DIGIT NUMBER THAT IS USED TO DECODE A MESSAGE.

EXPLANATION:

CHOP - 5411, THE POSSIBLE LETTER COMBINATIONS ARE AS FOLLOWS: C/K, H/L/U, O/P/S/Z, O/P/S/Z

- **CHOP**
- **CUPS**

FORK - 9195, THE POSSIBLE LETTER COMBINATIONS ARE AS FOLLOWS: F/R,O/P/S/Z, F/R,C/K

- **FORK**

DISH - 8614, THE POSSIBLE LETTER COMBINATIONS ARE AS FOLLOWS:D/T, I/Y, O/P/S/Z, H/L/U

- **DISH**

COOK - 5115, THE POSSIBLE LETTER COMBINATIONS ARE AS FOLLOWS: C/K,O/P/S/Z, O/P/S/Z, C/K

- **COOK**

THEREFORE, LEA IS UNSURE OF THE WORD CHOP.
A IS THE CORRECT ANSWER.

SEQUENCING LOGIC GAMES

SEQUENCING LOGIC GAMES ARE QUESTIONS WHEREIN YOU NEED TO IDENTIFY THE ORDER OF PLAYERS IN A SPECIFIC COMPETITION. THERE ARE HINTS GIVEN AND YOU CAN USE THESE HINTS TO IDENTIFY THE ORDER OF EACH PLAYER.

EXAMPLE:

FIVE FRIENDS, ANNE, GRACE, MATTHEW, LEN AND MARK, DECIDED TO HAVE A NOODLE-EATING COMPETITION. EACH PERSON HAS 2 ATTEMPTS TO EAT A BOWL OF NOODLES. THE AVERAGE TIME TO FINISH A BOWL OF NOODLES IS 30 SECONDS. THE RESULTS ARE STATED BELOW.

LEN IS FASTER THAN MATTHEW.
ANNE IS IN 2ND PLACE.
GRACE BEAT ONLY LEN AND MATTHEW.
ANNE CAN FINISH A BOWL OF NOODLES IN 17 SECONDS.
LEN CAN FINISH IN EXACTLY 30 SECONDS.

WHO AMONG THE PLAYERS WOULD MOST LIKELY FINISH LAST?

1. ANNE
2. MARK
3. MATTHEW
4. LEN

SEQUENCING LOGIC GAMES

SEQUENCING LOGIC GAMES ARE QUESTIONS WHEREIN YOU NEED TO IDENTIFY THE ORDER OF PLAYERS IN A SPECIFIC COMPETITION. THERE ARE HINTS GIVEN AND YOU CAN USE THESE HINTS TO IDENTIFY THE ORDER OF EACH PLAYER.

EXPLANATION:

WE CAN CONCLUDE THAT LEN AND MATTHEW ARE IN 4TH AND 5TH PLACES. LEN CAN FINISH IN 30 SECONDS AND LEN IS FASTER THAN MATTHEW SO HE CAN FINISH IN MORE THAN 30 SECONDS.

THE ORDER GOES
MARK > ANNE > GRACE > LEN > MATTHEW

MATTHEW IS MOST LIKELY TO FINISH LAST.

SUBJECT SELECTION

SUBJECT SELECTION QUESTIONS ARE QUESTIONS IN WHICH ONE HAS TO IDENTIFY THE SUBJECT THAT HE OR SHE CAN OR CANNOT CHOOSE FROM THE GIVEN LISTS.

EXAMPLE:

TRISHA WAS GIVEN A CHOICE BY HER DAD TO CHOOSE FOUR COUNTRIES THEY WOULD VISIT DURING THEIR SUMMER VACATION. HER DAD GAVE HER 4 LISTS BUT SHE COULD ONLY CHOOSE ONE FROM EACH.

List 1	List 2	List 3	List 4
Japan	Italy	Philippines	Greece
South Korea	Spain	New Zealand	South Korea
Mexico	Japan	Italy	Mexico
Ireland	Philippines	Spain	New Zealand

TRISHA WOULD LOVE TO GO TO ITALY, PHILIPPINES, AND SOUTH KOREA.

WHAT CAN SHE NOT CHOOSE?

A. NEW ZEALAND
B. SPAIN
C. MEXICO
D. GREECE

SUBJECT SELECTION

SUBJECT SELECTION QUESTIONS ARE QUESTIONS IN WHICH ONE HAS TO IDENTIFY THE SUBJECT THAT HE OR SHE CAN OR CANNOT CHOOSE FROM THE GIVEN LISTS.

EXPLANATION:

TRISHA CANNOT CHOOSE SPAIN BECAUSE IT IS IN THE SAME LIST AS ITALY.

OPTION B IS THE CORRECT ANSWER.

List 1	List 2	List 3	List 4
Japan	Italy	Philippines	Greece
South Korea	Spain	New Zealand	South Korea
Mexico	Japan	Italy	Mexico
Ireland	Philippines	Spain	New Zealand

SYLLOGISM

SYLLOGISM IS A DEDUCTIVE REASONING DISTINCT FROM INDUCTION. IT IS AN INSTANCE OF A FORM OF REASONING IN WHICH A CONCLUSION IS DRAWN (WHETHER VALIDLY OR NOT) FROM TWO GIVEN OR ASSUMED PROPOSITIONS (PREMISES), EACH OF WHICH SHARES A TERM WITH THE CONCLUSION, AND SHARES A COMMON OR MIDDLE TERM NOT PRESENT IN THE CONCLUSION.

EXAMPLE:

THERE ARE THREE MILK TEA FLAVOUR OPTIONS IN A LOCAL MILK TEA SHOP BESIDE THE GROCERY STORE; ORIGINAL, GRASS JELLY AND RED BEAN.

- EVERYONE WHO LIKES THE GRASS JELLY MILK TEA ALSO LIKES THE RED BEAN MILKTEA
- NO ONE WHO LIKES THE RED BEAN MILK TEA LIKES THE ORIGINAL MILK TEA.

GERALD LIKES THE RED BEAN MILK TEA. WHICH OF THE FOLLOWING MUST BE TRUE?

A. GERALD MAY LIKE THE GRASS JELLY.
B. GERALD DOES NOT LIKE ANY MILK TEA FLAVOUR.
C. IF GERALD LIKES THE ORIGINAL MILK TEA, THEN HE MUST ALSO LIKE THE GRASS JELLY.
D. GERALD DOES NOT LIKE THE GRASS JELLY.

SYLLOGISM

SYLLOGISM IS A DEDUCTIVE REASONING DISTINCT FROM INDUCTION. IT IS AN INSTANCE OF A FORM OF REASONING IN WHICH A CONCLUSION IS DRAWN (WHETHER VALIDLY OR NOT) FROM TWO GIVEN OR ASSUMED PROPOSITIONS (PREMISES), EACH OF WHICH SHARES A TERM WITH THE CONCLUSION, AND SHARES A COMMON OR MIDDLE TERM NOT PRESENT IN THE CONCLUSION.

EXPLANATION:

WE KNOW THAT GERALD LIKES THE RED BEAN MILK TEA. WE CAN SAY THAT THERE'S A POSSIBILITY THAT HE ALSO LIKES THE GRASS JELLY MILK TEA BECAUSE IT WAS STATED IN THE PASSAGE THAT ALL PEOPLE WHO LIKED THE GRASS JELLY ALSO LIKED THE RED BEAN. THE STATEMENT IN OPTION B IS INCORRECT BECAUSE WE KNOW FOR A FACT THAT GERALD LIKES THE RED BEAN MILK TEA SO IT AUTOMATICALLY INVALIDATES THE STATEMENT IN OPTION B. THE STATEMENTS IN OPTIONS C AND D ARE ALSO INCORRECT BECAUSE THERE IS NO PROOF THAT CAN PROVE THE CLAIM THAT GERALD DOES NOT LIKE THE GRASS JELLY AND WE DON'T KNOW IF HE LIKES THE ORIGINAL MILK TEA.

THEREFORE, A IS THE CORRECT ANSWER.

RELEVANT SELECTION

THINKING SKILLS MATERIAL GUIDE

CHEAPEST SHOP (TABLE)

CHEAPEST SHOPS ARE QUESTIONS THAT REQUIRE YOU TO IDENTIFY WHICH SHOP OFFERS THE CHEAPEST ITEMS.

EXAMPLE:

VICKY WANTS TO BUY 12 STRAWBERRY MILKSHAKES FOR ALL HER FRIENDS. THERE ARE 4 SHOPS THAT SELL STRAWBERRY MILKSHAKES IN THE METRO. THE PRICES OF STRAWBERRY MILKSHAKES IN EACH SHOP ARE SHOWN IN THE TABLE BELOW.

SHOP	PRICE	PROMO
Shop A	$4	50% off on the 4th and 6th item
Shop B	$9	Buy 1 get 2 free
Shop C	$5	10% off on total bill
Shop D	$2	Regular Price

VICKY WISHES TO BUY ALL THE STRAWBERRY MILKSHAKES IN ONE STORE TO AVOID THE INCONVENIENCE OF GOING FROM ONE STORE TO ANOTHER. VICKY WANTS TO BUY FROM THE CHEAPEST SHOP. WHICH SHOP SHOULD VICKY BUY HER STRAWBERRY MILKSHAKES FROM?

A. SHOP A
B. SHOP B
C. SHOP C
D. SHOP D

CHEAPEST SHOP (TABLE)

CHEAPEST SHOPS ARE QUESTIONS THAT REQUIRE YOU TO IDENTIFY WHICH SHOP OFFERS THE CHEAPEST ITEMS.

EXPLANATION:

SHOP	PRICE	PROMO	**PRICE TO BE PAID**
Shop A	$4	50% off on the 4th and 6th item	$44
Shop B	$9	Buy 1 Take 2	$36
Shop C	$5	10% off on total bill	$54
Shop D	$2	Regular Price	$24

VVICKY SHOULD GET THE STRAWBERRY MILKSHAKES FROM SHOP D SINCE IT OFFERS THE CHEAPEST STRAWBERRY MILKSHAKES.

OPTION D IS THE CORRECT ANSWER.

MINIMUM SCORE

THESE QUESTIONS INVOLVE SIMPLE AVERAGING OF TOTAL RESULTS OF ATTEMPTS/ROUNDS IN A GIVEN PASSAGE.

EXAMPLE:

IN A HIGH JUMP COMPETITION, 6 STUDENTS WERE ALLOWED THREE ATTEMPTS EACH AT JUMPING AS HIGH AS POSSIBLE. THE LONGEST DISTANCE IN THE THREE ATTEMPTS WAS COUNTED AS THEIR 'RESULT'. THE ATTEMPTS FOR THE 6 STUDENTS ARE SHOWN IN THE TABLE.

Student number	Attempt 1 (in metres)	Attempt 2 (in metres)	Attempt 3 (in metres)
Annabelle	1.79	1.47	1.66
Bob	1.70	1.87	1.66
Clara	1.99	1.66	1.99
Dylan	1.88	1.86	1.87
Evelyn	1.82	1.89	1.80
Finley	1.63	1.90	2.1

WHICH STUDENT CAME 3RD IN THE COMPETITION?

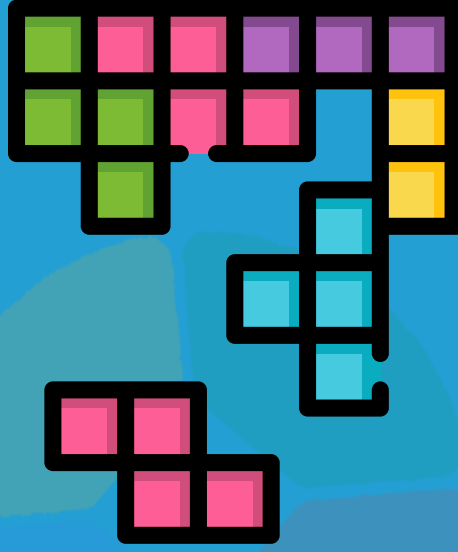
A. ANNABELLE
B. FINLEY
C. BOB
D.. EVELYN

EXPLANATION:

ANNABELLE:1.79
BOB: 1.87
CLARA: 1.99
DYLAN: 1.88
EVELYN: 1.89
FINLEY: 2.1

WITH THE GIVEN DATA ABOVE, WE CAN CONCLUDE THAT FINLEY PLACED FIRST, CLARA PLACED SECOND, AND EVELYN

MINIMUM SCORE



THESE QUESTIONS INVOLVE SIMPLE AVERAGING OF TOTAL RESULTS OF ATTEMPTS/ROUNDS IN A GIVEN PASSAGE.

EXPLANATION:

ANNABELLE: 1.79
BOB: 1.87
CLARA: 1.99
DYLAN: 1.88
EVELYN: 1.89
FINLEY: 2.1

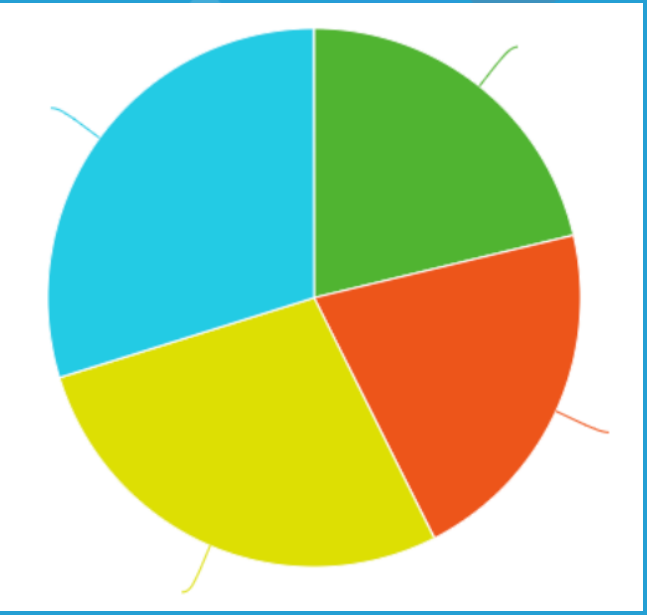
WITH THE GIVEN DATA ABOVE, WE CAN CONCLUDE THAT FINLEY PLACED FIRST, CLARA PLACED SECOND, AND EVELYN PLACED THIRD. THUS, OPTION D IS THE CORRECT ANSWER.

PIE CHART

QUESTIONS UNDER THIS TYPE GENERALLY ASK YOU TO GUESS IF CERTAIN SECTIONS OF A PIE CHART MATCH ITS CORRESPONDING DATA.

EXAMPLE:

A MUSIC TEACHER DID A SURVEY IN EACH CLASS ABOUT THE MUSICAL INSTRUMENT THEY LIKE MOST. THE TEACHER HAS A TOTAL OF 4 CLASSES AND EACH CLASS CONSISTS OF 47 STUDENTS. EACH STUDENT CAN ONLY CHOOSE 1 MUSICAL INSTRUMENT. UNFORTUNATELY, THE TEACHER LOST THE LABEL FOR THE PIE CHART.



WHICH CLASS DO YOU THINK THE PIE CHART ABOVE REPRESENTS?

	GUITAR	PIANO	FLUTE	DRUMS
CLASS A	10	10	13	14
CLASS B	20	17	5	5
CLASS C	15	15	15	2
CLASS D	14	9	16	8

A. CLASS A
B. CLASS B
C. CLASS C
D. CLASS D

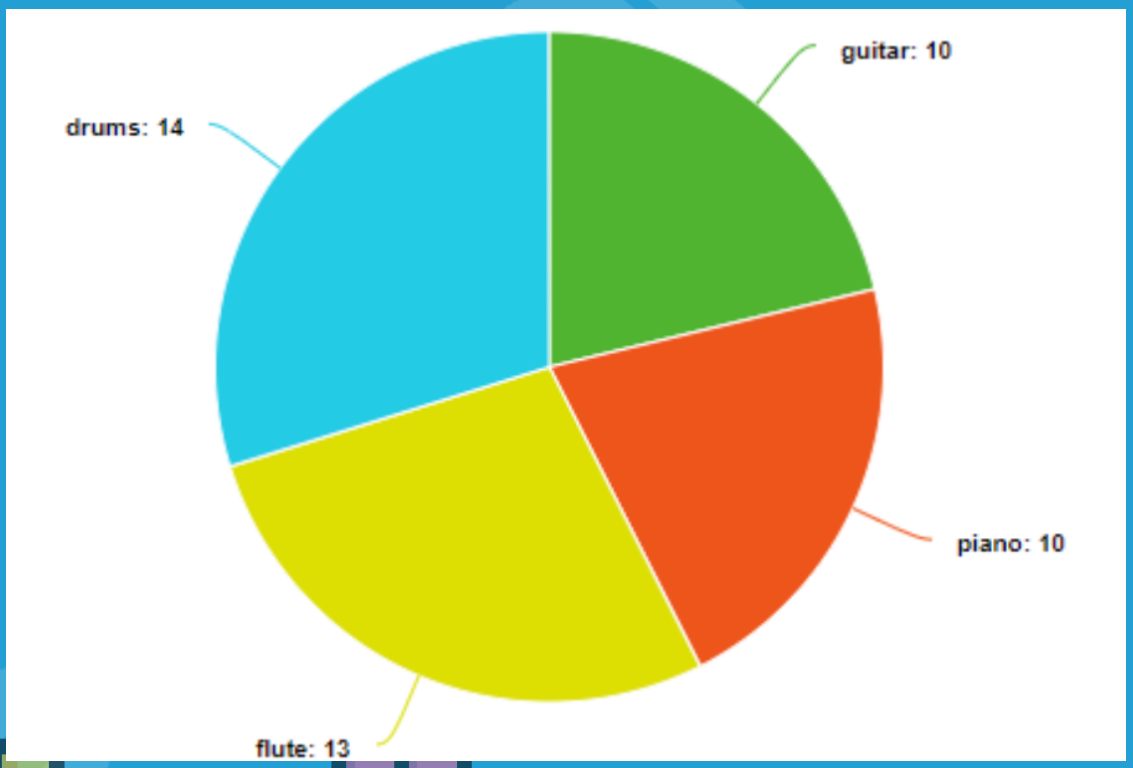
PIE CHART

QUESTIONS UNDER THIS TYPE GENERALLY ASK YOU TO GUESS IF CERTAIN SECTIONS OF A PIE CHART MATCH ITS CORRESPONDING DATA.

EXPLANATION:

THE PIE CHART REPRESENTS THE STUDENTS' MOST LIKED MUSICAL INSTRUMENT.

OPTION A IS THE CORRECT ANSWER.



TICKET COMBO

THESE QUESTIONS ASK YOU FOR THE CHEAPEST VALID COMBINATIONS IN A GIVEN PASSAGE.

EXAMPLE:
THE PRICES FOR TWICE'S CONCERT TICKETS ARE SHOWN IN THE TABLE BELOW.

Pass for 1 day	Pass for 4 days (consecutive)	Pass for 7 days (consecutive)
$300	$500	$650

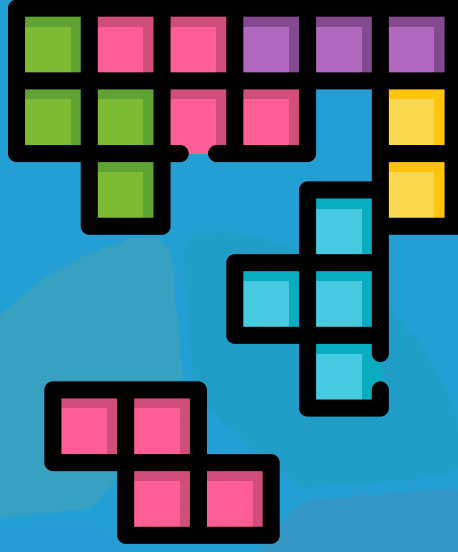
RAJ WILL NEED A TICKET FOR THE FOLLOWING DAYS OF THE MONTH: 9, 13, 14, 15, 16, 22, 23, 24, AND 25.

HOW MUCH IS THE CHEAPEST VALID COMBINATION RAJ COULD USE?

A. $1000
B. $1300
C. $1500
D. $1850

TICKET COMBO

THESE QUESTIONS ASK YOU FOR THE CHEAPEST VALID COMBINATIONS IN A GIVEN PASSAGE.



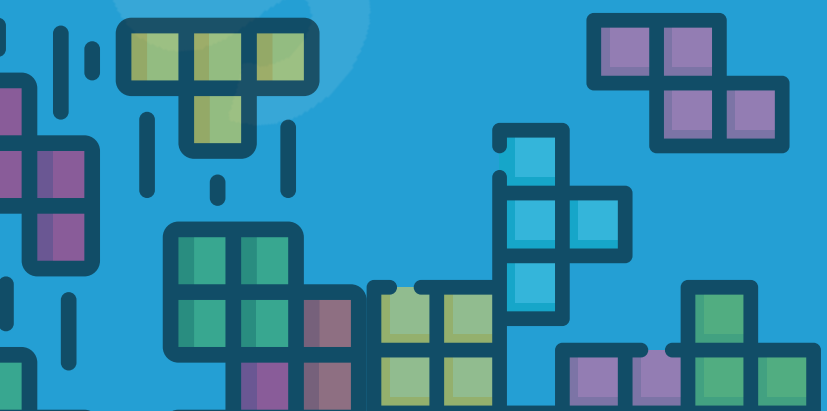
EXPLANATION:

RAJ COULD USE THESE PASSES:

ONE 1-DAY PASS FOR DATE 9.
TWO 4-DAY PASSES FOR DATES 13,14,15,16 AND 22,23,24,25

IT WOULD COST RAJ $1300.

OPTION B IS THE CORRECT ANSWER



BAR GRAPH

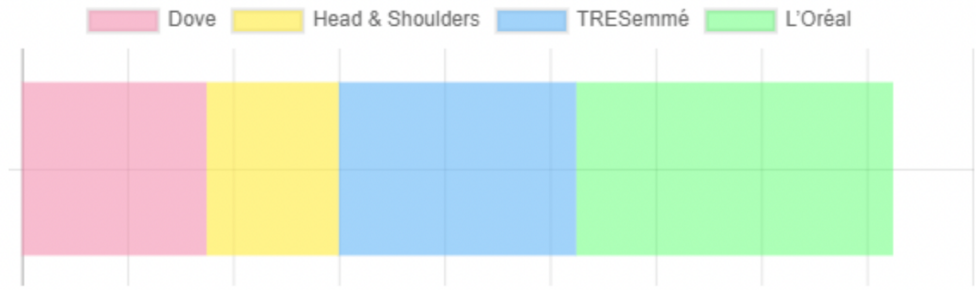
A GRAPH IN WHICH DATA ARE PLOTTED USING RECTANGULAR BARS OR COLUMNS THAT INDICATE THE TOTAL NUMBER OF OBSERVATIONS IN THE DATA FOR THAT CATEGORY.

EXAMPLE:
A POLL WAS TAKEN FOR THE PREFERENCE OF THE SWIMMING TEAM'S FAVOURITE SHAMPOO.

THE RESULTS ARE SHOWN IN THE TABLE:

Brand of Shampoo	Dove	Head & Shoulders	TRESemmé	Pantene	L'Oréal
Number of votes	35	15	45	10	60

A divided bar chart was then produced of the results, but votes for Pantene were mistakenly added to another shampoo.



WHICH SHAMPOO WERE THE VOTES OF PANTENE ADDED TO?

1. DOVE
2. HEAD & SHOULDERS
3. TRESEMMÉ
4. L'ORÉAL

The 10 votes for Pantene were added to Head & Shoulders.