

NO.	QUESTION
1	<p>A special code uses these two rules in encoding words:</p> <ol style="list-style-type: none"> 1. For letters in an <u>odd</u> position, the code will be the letter in its position if the alphabet was reversed. (A will become Z) 2. For letters in an <u>even</u> position, the code will be the letter found 2 steps before it. (C will become A) <p>For example, BREATH is coded as YPVYGF, and AGENDA is coded as ZEVLWY</p> <p>It is Hailey’s first time to use the special code above. She sent “VACCOJVLG” to Justin after his amazing performance in class.</p> <p>What can we derive from the code VACCOJVLG?</p> <ol style="list-style-type: none"> A. ECXELLENT B. EYXALHEJT C. EXECLENT D. EXCELLENT
2	<p>As a secret mode of communication, Brie and Bella made a set of their own language codes Below is an example of how his code language works:</p> <p>‘Becoming Conclude Platform Approval’ is written as ‘15@m 13!c 21!f 20@r’</p> <p>‘Ceremony Bulletin Pursuant Adequate’ is written as ‘33@m 22@l 28@s 13@d’</p> <p>‘Portable Bachelor Cautious Alliance’ is written as ‘13@t 26@h 27@c 13+l’</p> <p>‘Announce Casualty Periodic Building’ is written as ‘13+n 33+l 11+r 15!d’</p> <p>What is the code for “INTERCONTINENTAL”?</p> <ol style="list-style-type: none"> A. 16!n B. 28!t C. 16!t

	D. 28!n
3	<p>During their group meeting prior to their school's science fair, students Felice, Mary, and Ronea were suspected of having made a crucial mistake in doing their project. Their head coach, Mr. Brian, knew that two of them were guilty. When facing the threat of disqualification, each of the students made a statement. While one of them is lying, two of them are not.</p> <p>Felice - "Mary is not guilty" Mary - "I am guilty" Ronea - "Mary is guilty"</p> <p>Which of the following statements must be true?</p> <p>A. Mary and Ronea are guilty. B. Felice is lying and guilty. C. Mary is not guilty and lying. D. Felice is the only one lying among the three.</p>
4	<p>The Running Men, composed of Roman, Randy, Thadeus, Thomas, and Talla, had a friendly foot race to see who among them could sprint the fastest prior to their marathon this weekend.</p> <p>Randy was able to beat three people No one came after Thadeus Talla came immediately after Randy Roman ranked first</p> <p>What is the ranking of the whole group?</p> <p>A. Roman, Randy, Talla, Thomas, Thadeus B. Roman, Randy, Thomas, Talla, Thadeus C. Roman, Randy, Talla, Thadeus, Thomas D. Roman, Randy, Thomas, Thadeus, Talla</p>
5	<p>Bea and her group of friends were hanging out for the night when they decided to have a bet through the rolling of dice.</p>

	<p>Each of them had a dozen candies.</p> <p>If Bea rolls the dice at an even number, then Christine will get 2 candies from Mae. If Mae rolls the dice at an odd number, then Christine will give all of her candies to Bea.</p> <p>Christine rolls 3. Mae rolls 6.</p> <p>How many candies does Christine have after two of them rolled the dice?</p> <p>A. 12 B. 10 C. 2 D. 0</p>
6	<p>Therese has a six-digit code for her credit card.</p> <p>The third digit is two less than the sixth digit. The second and fifth digits represent the northmost part of a time clock respectively. The sixth digit is twice the number of the first digit. The first digit is the second factor of the fourth digit when it is multiplied by 1. The fourth digit is 3.</p> <p>What is Therese's six-digit code?</p> <p>A. 314336 B. 314326 C. 313423 D. 314236</p>
7	<p>During a Sydney-wide high school quiz bowl contest, Jan, Mark, and Vhan were competing for the championship spot of the tournament. They all had 5 rounds and commenced with the following results:</p>

Name	Round 1	Round 2	Round 3	Round 4	Round 5
Jan	1st	3rd	3rd	2nd	3rd
Mark	3rd	2nd	1st	1st	1st
Vhan	2nd	1st	2nd	3rd	2nd

Every 1st place is worth 5 points; 2nd place for 4 points; and 3rd place for 2 points.

Jan is confident that he will not rank in 3rd place for the remaining rounds.

What is the minimum score needed for one among all contestants to be guaranteed the win?

- A. 5
- B. 4
- C. 3
- D. 2

8

Julius and Erving were trying to figure out how fast their father's horse could accelerate. They raced the horse to the farm field, approximately 155km away. The test race for the horse took them 120 minutes.

Julius: "The horse accelerated at 75km/hr."

Erving: "The horse accelerated at 80km/hr."

Which of the following statements is true?

- A. Julius is correct
- B. Erving is correct
- C. Both Julius and Erving are correct
- D. Neither Julius nor Erving are correct

9

Mordecai wants to prank text his friend, Daenerys, at night.

Mobile phones use the following keys for forming words when sending text messages.

2 3 4 5 6 7 8 9
ABC DEF GHI JKL MNO PQRS TUV WXYZ

To form the word RED, for instance, it requires 7 to be pressed three times, 3 to be pressed twice, and then 3 to be pressed once more.

Mordecai sent this message to Daenerys: "PEEKABOO"

Which pair of keys each has an odd number of total presses?

- A. 3 and 5
- B. 6 and 7
- C. 5 and 6
- D. 2 and 7

10

Speed owns a small burger stall near his neighbourhood. Each burger he makes costs around \$3.5 to make. He sells it for \$5 each. From Monday to Thursday, he was able to sell 243 pieces of burgers. Yesterday, he spent around \$143.5 on making burgers that he sold.

How much did Speed earn for the whole week?

- A. \$1215
- B. \$1420
- C. \$1100
- D. \$1540

11

During the graduation ceremony of Harvard University, there were a total of 393 graduates.
All of the graduates but 27 received a medal.
None of them has had more than two medals.
There were 424 medals given in the ceremony.

Matthew: "I bet there are 318 graduates who had one medal only."

Ang: "I think there are 308 graduates who had one medal only."

	<p>Which of the following statements is true?</p> <ul style="list-style-type: none"> A. Only Matthew is correct B. Only Ang is correct C. Both Matthew and Ang are correct D. Neither Matthew nor Ang are correct
12	<div style="border: 1px solid black; padding: 10px; margin-bottom: 10px;"> <p>Scholarly students, according to experts, are great inventors. Some Scholarly students have A+ grades at school. A few of all Scholarly students wake up early. Scholarly students are energetic and confident.</p> </div> <p>If the information in the box is true, whose reasoning is correct?</p> <p>Roxanne: “If you have A+ grades, then you must be a Scholarly student.”</p> <p>Levi: “Some Scholarly students wake up early, and all of them are energetic.”</p> <ul style="list-style-type: none"> A. Roxanne only B. Levi only C. Both Roxanne and Levi D. Neither Roxanne nor Levi
13	<p>If a person is a lawyer, then they are excellent at physics.</p> <p>If the above statement is true, which of the following must also be true?</p> <ul style="list-style-type: none"> A. Marena is not a lawyer, so she is not excellent at physics. B. Only lawyers are good at physics. C. All who are good at physics are lawyers. D. A person who is not good at physics is not a lawyer.
14	<p>If you have a large following, which means a lot of followers and a lot of sway over people, you are considered an influencer on social media. The rise of influencers in today’s time from platforms such as Instagram or Tiktok implies that being influential online has become more feasible than ever before.</p>

	<p>This means that most people can easily gain opportunities from netizens by sharing their content on social media, may it be videos or pictures of their professions or hobbies.</p> <p>Which of the following statements, if true, best weakens the argument?</p> <ul style="list-style-type: none">A. Not all social media influencers post good content online.B. It takes a long amount of time to reach a wide audience on social media.C. Most social media influencers are on Youtube, not on Tiktok or Instagram.D. Social media influencers only post content for money, and not for everyone’s entertainment.
15	<p>It has been the norm for most school systems to mandate their students to go to school early and on time — and for the right reasons. Teachers and parents believe that this teaches kids punctuality in all its forms, which is a crucial trait that one has to practise consistently as they face bigger responsibilities growing up. This involves meeting different people with different schedules to meet.</p> <p>Which of the following statements, if true, best strengthens the argument?</p> <ul style="list-style-type: none">A. Being on time teaches kids how to become the earliest person to arrive in the classroom.B. Being on time allows for the internalisation of politeness and respect for other people’s time.C. Being on time creates a sense of achievement for children when they do not miss anything.D. Being on time allows kids to get more tasks accomplished in the classroom.
16	<p>Friendships, where people have mutual care and affection between them, inspires personal growth and happiness. When two individuals, for instance, have created a deep bond, they feel the urge to look out for each other, even going as far as making sacrifices. Many people claim that this kind of relationship brings them a great feeling of security.</p> <p>Which of the following statements, if true, best strengthens the argument?</p> <ul style="list-style-type: none">A. People often feel light-hearted whenever they are with their friends.B. Friendships incentivise the making of sacrifices for the sake of the other person.C. Friendships often bring people assurance that someone will always be there for them.D. Friendships often bring excitement to a person’s life.
17	<p>Recent UN data on food insecurity paints a bleak picture of a growing international problem: global hunger is not only getting worse. Similar to this, CARE, a global humanitarian organisation, projects</p>

that in 2021, 150 million more women than men will be food insecure. Despite improvements since 2015, the world's food security has declined, with 150 million more people going hungry, the majority of whom are women and children, since 2019.

Which of the following statements best concludes the argument?

- A. Hunger is increasing worldwide, and mostly women bear the brunt of food insecurity.
- B. Women have turned the food crisis into a much worse state in today's time.
- C. Food security has declined due to the overpopulation of women compared to men.
- D. Women have continuously asserted a cry for help from the government to gain access to food.

18

According to Foot Locker, a well-known shoe store, the Air Jordan 1 Bred, which was originally released back in 1994, is considered to be the most iconic basketball shoe in history. The shoes were worn by the famous basketball player Michael Jordan back in the 90s. In today's time, most shoe enthusiasts, or "sneakerheads", buy the Air Jordan 1 Bred off the shelves of shoe stores, especially with its most recent retail price decrease.



Angelo: "All basketball enthusiasts are buying the famous Air Jordan 1 Breds. They say it's the best shoe out there on the market. As a basketball enthusiast, there is no reason why I shouldn't have one, so I should go to Foot Locker and get myself a pair."

Which of the following best expresses the flaw in Angelo's argument above?

- A. Angelo assumes that everyone is buying the famous Air Jordan 1 Breds with no proof.
- B. Angelo limited his options without considering that there are better shoe brands out there.
- C. Angelo wants to buy the shoes mainly because every basketball enthusiast is doing so.
- D. Angelo believes that buying the famous shoes would lead to a chain of positive events.

19

Jacob and Andre are both vying for the position of presidency for the upcoming Supreme Student Council elections. They both presented their plans of action in order to give the students a glimpse of who to vote for. Jacob said in his public speech that his platform of extending school break times would allow students to have adequate rest to participate and excel in class.



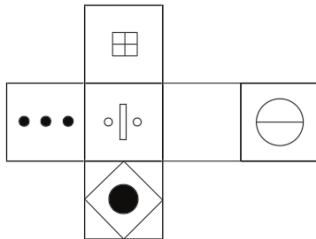
Andre: “Students should not believe Jacob. He doesn’t even come from a family with experienced leadership, unlike me, so how can he effectively implement his platform?”

Which of the following best expresses the flaw in Andre’s argument above?

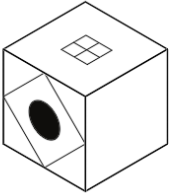
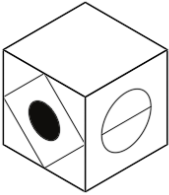
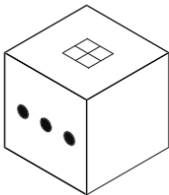
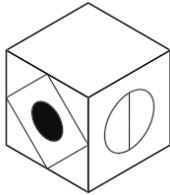




- A. Andre derived his statement out of his angst against his opponent.
- B. Andre is speaking from a jealous standpoint just because Jacob presented a better platform.
- C. Andre refuted Jacob’s platform using the latter’s irrelevant personal background.
- D. Andre thinks that Jacob’s claims are not significant, hence, people should not believe him.

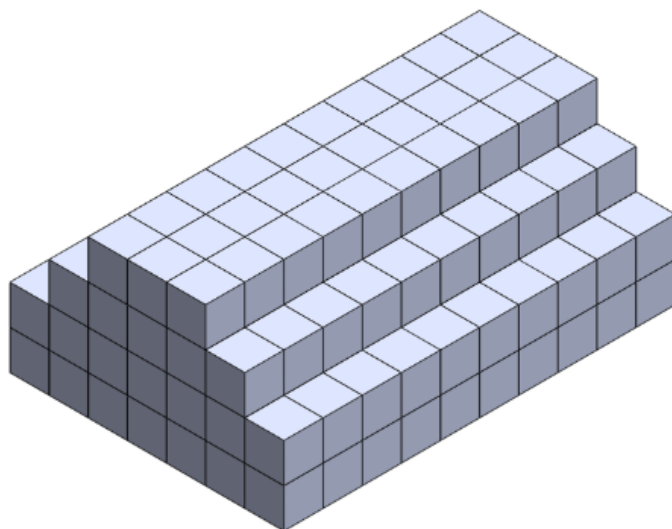
20

A net with different sides is shown below.



If the net were folded into a cube, which of the following would be a possible output?

	<p>A. </p> <p>B. </p> <p>C. </p> <p>D. </p>
<p>21</p>	<p>Keisler wants to tile his kitchen floor and is trying to decide between his four favourite tiles. However, only one of them is suitable for the job, as three of them won't cover the floor without leaving numerous gaps.</p> <p>Which one is suitable for the job?</p> <p>A. </p> <p>B. </p> <p>C. </p> <p>D. </p>
<p>22</p>	<p>A staircase is made from 220 cubes fitted tightly together in the arrangement below.</p> <p>The bottom 2 layers are then immersed in quick-drying paint. All the exposed faces become covered in paint, but the inner ones remain unpainted.</p>



How many cubes have at least one side painted?

- A. 84
- B. 100
- C. 110
- D. 112

23

Ana is planning to host a pool party at the weekend with her classmates. She wants to purchase 40 bottles of orange juice for everyone to enjoy. While shopping at the mall, she found some stores that sell the orange juice she needs to buy.

Shop	Price per bottle of orange Juice	Discount
Sun Top	\$12	40% Off Total Price
Tang	\$9	No Discount
Nestle	\$15	Buy 10, Get 5 Free
Tropicana	\$18	45% Off Total Price

Jan: "If you think about it, the priciest shop is \$160 more than the cheapest shop."

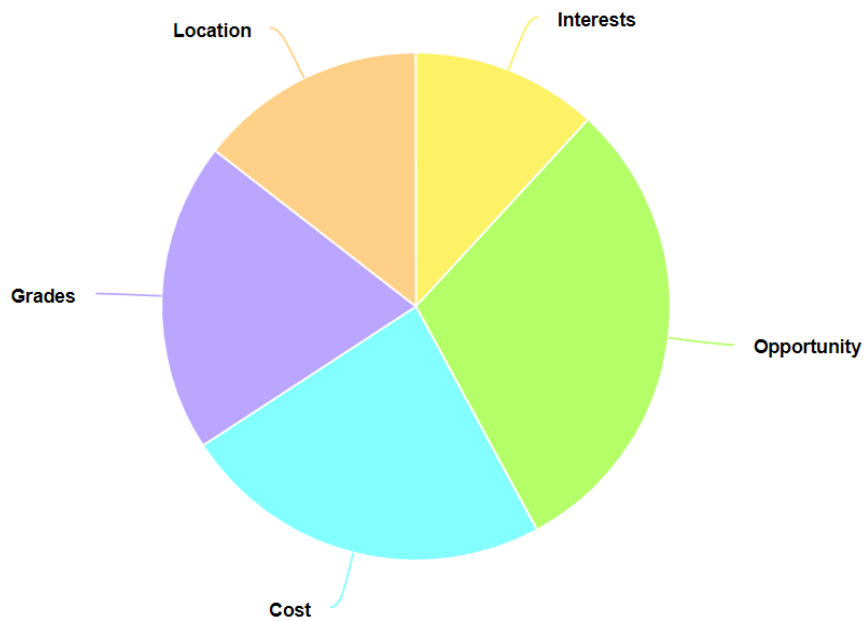
Endrina: "The second cheapest shop is Tang."

Who among the two is correct?

- A. Jan
- B. Endrina
- C. Both are correct
- D. Neither of them are correct

24

Jackie was curious about what factors students consider when selecting a college course. After conducting an online survey this summer, she was able to collate the data below.



Variable	Interests	Opportunity	Cost	Grades	Location
Value	1100	2300	1800	1500	900

She transferred the data to a pie chart, but put one of the lines of the pie chart in the wrong place.

The lines between which variables must be incorrect?

- A. Cost and Grades
- B. Grades and Location
- C. Location and Interests
- D. Interests and Opportunity
- E. Opportunity and Cost

25 The Quintin Tech Festival is about to commence in September. Luis plans to visit the event for the entirety of the first week of the month. He also wants to spend less for this festival.

One Day Ticket	Three Day Ticket (consecutive)	Eight Day Ticket (consecutive)
\$12	\$30	\$80

How much is the cheapest ticket/s that Luis can spend for the festival?

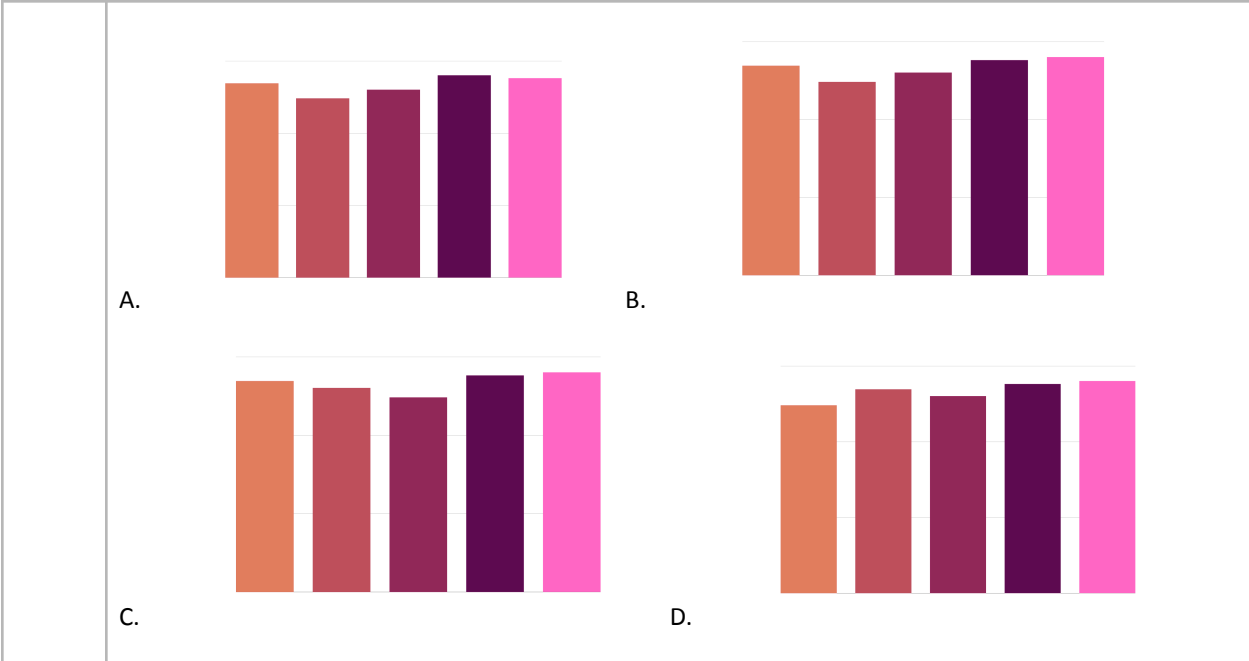
- A. \$72
- B. \$60
- C. \$48
- D. \$35

26 As the general manager of the Mall of Arabia, Mark gathered data on the total number of customers that visited the sportswear stores they have for the day.

Nike	Adidas	New Balance	Puma	Converse
1345	1240	1300	1380	1400

Mark created a bar chart representation of the data he has gathered.

Which of the following bar charts best represents the data in the table?

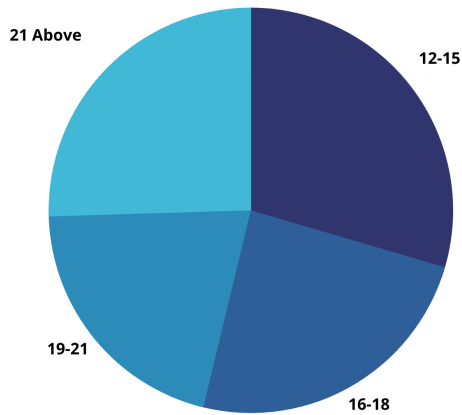


27

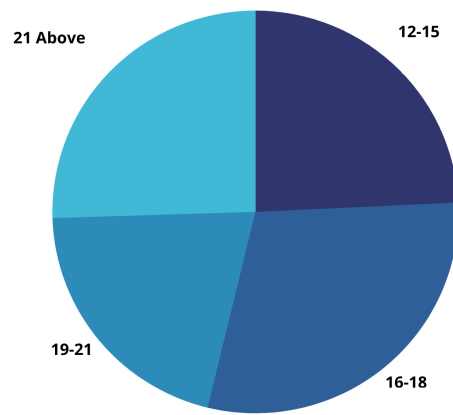
Jake was tasked to tally the total number of customers that went into the Fully Booked Bookstore for the whole day. For the market research purposes of the business, he kept a tally based on their age. The results can be seen below.

AGE RANGE	8:00 - 10:00	10:00 - 12:00	12:00 - 14:00	14:00 - 16:00	16:00 - 18:00
12-15	14	16	25	50	63
16-18	15	9	15	43	53
19-21	9	8	11	39	51
21 Above	23	11	9	49	53

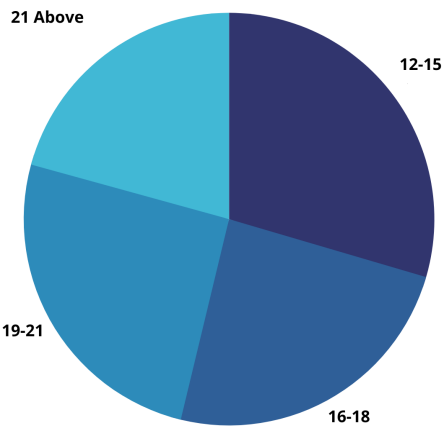
Which of the following pie charts best represents the total number of people per age range for the whole day?



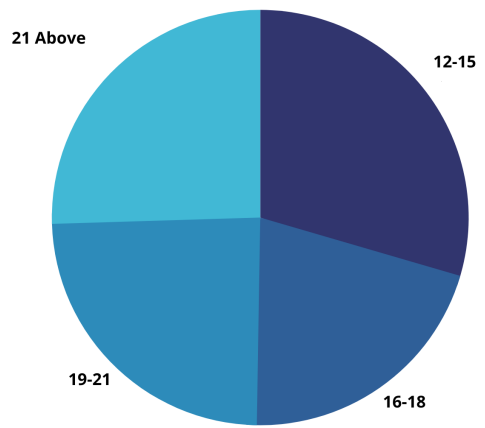
A.



B.



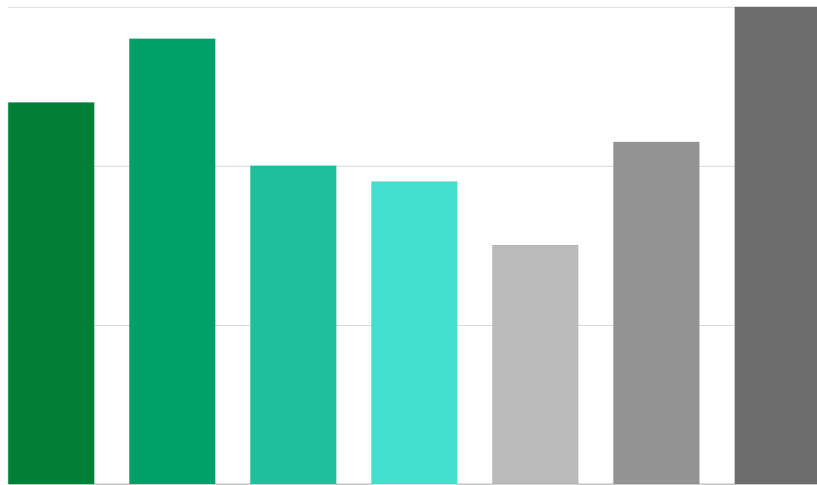
C.



D.

28

Morisette aimed to keep track of her daily spending for school. As part of implementing this resolution of hers, she made a bar graph as a representation of her spending for the whole week.



Which of the following data best matches the bar chart?

A.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
\$240	\$280	\$190	\$200	\$150	\$215	\$300

B.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
\$240	\$280	\$200	\$190	\$215	\$150	\$300

C.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
\$240	\$280	\$200	\$190	\$150	\$215	\$300

D.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

\$240	\$280	\$200	\$150	\$190	\$215	\$300
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29 Demarie will be celebrating her birthday next month. As early as now, she is already planning her birthday party celebration to be held at her parents' lake house. She was able to list down the following things she needs for the party: 12 Balloons, 1 Birthday Cake, 5 Large Trays of Food, and 21 pieces of party hats.

ITEM	VARIATION	PRICE
Balloon	Latex	\$3
	Rubber	\$4
Birthday Cake	Red Ribbon	\$25
	Goldilocks	\$22
Large Tray of Food	Sierra Catering Services	\$11
	Delta Catering Services	\$14
Party Hat	Plastic	\$3
	Hard Cardboard	\$3

What is the difference between the options with the priciest total and the cheapest total?

- A. 36
- B. 30
- C. 24
- D. 6

30 Mr. Cinco is conducting periodic exams for his 12 enrolled students under his Earth and Life Science subject. The class is divided into three grading periods, where there is an exam for each period. Their final grades will be based on the calculated average score of the three periodic exams. The grades

shown in the table below are the grades of the students for the three periodic exams.

Student	1st Exam	2nd Exam	3rd Exam
Princess	4	7	3
Raul	8	8	7
Diana	7	6	8
Mike	8	9	5
Oscar	7	10	4
Almira	6	8	4
Yehjen	6	5	3
Kyla	8	10	7
Elijah	10	8	9
Jeff	7	8	6
Vincent	10	8	9
Kennedy	9	9	5

If the perfect score for each exam is 10, what is the maximum passing score (should be a whole number) that the teacher should set in order to achieve a 75% passing rate?

- A. 5
- B. 6
- C. 7
- D. 8