## Alg Mini MA912D72 Form A

1 The diagram shows a Venn diagram for sets $A$ and $B$. What is the intersection?
Set A: factors of 9
Set B: factors of 12

A. $\{1\}$
B. $\{1,3\}$
C. $\{2,4,6,12\}$
D. $\{9\}$

230 people were asked if they wore a blue shirt or a red shirt this week. The Venn diagram shows the results of the survey.


What is the missing value in the Venn diagram?
F. 7
G. 12
H. 18
I. 19

3 Look at the Venn diagram below. It shows set $A$ and set $B$ in the universe $U$. Which description represents the shaded regions?

A. the complement of $(A \cap B)$ in $U$
B. $(A \cup B) \cup($ the complement of $A)$
C. (the complement of $(A \cap B)$ in $U) \cap(A \cup B) \quad$ D. $A \cup B$

440 candidates apply for a unique job. The job has both a height requirement and a weight requirement. The following information is known about the candidates:

21 candidates meet the height requirement;
17 candidates meet the weight requirement;
8 candidates meet both the weight and height requirements.

How many candidates meet only the height requirement?
F. 8
G. 9
H. 13
I. 21

5 In Mr. Rojo's music class, 14 students play piano, 18 students play guitar, and 9 play drums. No student plays any other istruments. The following information is also true:

7 students play only guitar;
2 students play all three instruments;
5 students play only piano;
1 student plays piano and drums, but not guitar
This information is placed in a Venn diagram as shown:


Which of the following correcly shows the completed Venn diagram?


Alg Mini MA912D72 Form A Answer Section

| 1 | ANS: B | PTS: | 1 | STA: | MA.912.D.7.2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | ANS: F | PTS: | 1 | STA: | MA.912.D.7.2 |
| 3 | ANS: C | PTS: | 1 | STA: | MA.912.D.7.2 |
| 4 | ANS: H | PTS: | 1 | STA: | MA.912.D.7.2 |
| 5 | ANS: B | PTS: | 1 | STA: | MA.912.D.7.2 |

