

AMC 10 (A) (B)

AMC 12 (A) (B)

ANSWERS

1. (A) (B) (C) (D) (E)

2. (A) (B) (C) (D) (E)

3. (A) (B) (C) (D) (E)

4. (A) (B) (C) (D) (E)

5. (A) (B) (C) (D) (E)

6. (A) (B) (C) (D) (E)

7. (A) (B) (C) (D) (E)

8. (A) (B) (C) (D) (E)

9. (A) (B) (C) (D) (E)

10. (A) (B) (C) (D) (E)

11. (A) (B) (C) (D) (E)

12. (A) (B) (C) (D) (E)

13. (A) (B) (C) (D) (E)

14. (A) (B) (C) (D) (E)

15. (A) (B) (C) (D) (E)

16. (A) (B) (C) (D) (E)

17. (A) (B) (C) (D) (E)

18. (A) (B) (C) (D) (E)

19. (A) (B) (C) (D) (E)

20. (A) (B) (C) (D) (E)

21. (A) (B) (C) (D) (E)

22. (A) (B) (C) (D) (E)

23. (A) (B) (C) (D) (E)

24. (A) (B) (C) (D) (E)

25. (A) (B) (C) (D) (E)

IMPORTANT DIRECTIONS FOR MARKING THIS FORM:

1. Before taking the test, complete all personal information on BOTH sides of this form.
2. For all coded information, including your answers, USE A NO. 2 PENCIL ONLY, to completely blacken the circle. A CIRCLE IS COMPLETELY BLACKENED ONLY IF THE LETTER OR NUMBER IS NOT VISIBLE. IF ANY PART OF A LETTER OR NUMBER IS VISIBLE, THE OPSCAN READER MAY NOT READ THE MARKED ANSWER.

PROPER mark: (A) (B) (C) (D) (E) IMPROPER marks: (✓) (X) (—) (•) (◊)

Agreement of Student:

I have not discussed these problems or solutions with anyone. Since not all students take this contest at the same time, I will only discuss the problems within my school, after all official participation is complete. These answers represent my own work.

Student Signature

[illegible]

The American Mathematics Competitions receives requests from educational institutions and organizations for names, addresses and grade levels of AMC contestants. The optional data on ethnic origin and gender is used for recruiting and academic purposes.

☐ YES, I CONSENT

Darken the circle above if you give the AMC permission to release this information to these organizations.
(Your score will not be affected if you do not blacken the circle.)

ETHNIC ORIGIN (Optional)		DATE OF BIRTH					GRADE		STUDENT ID NUMBER (If known)									
<input type="radio"/> White/non-Hispanic	Jan <input type="radio"/>	DAY		YEAR			<div>≤</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>11</div> <div>12</div> <div>13</div> <td colspan="10"></td>											
<input type="radio"/> Asian/Pacific Islander	Feb <input type="radio"/>																	
<input type="radio"/> Black/non-Hispanic	Mar <input type="radio"/>	0	0	0	0	0												
<input type="radio"/> Native American/ Alaskan	Apr <input type="radio"/>	1	1	1	1	1												
<input type="radio"/> Hispanic	May <input type="radio"/>	2	2	2	2	2												
	Jun <input type="radio"/>	3	3	3	3	3												
	Jul <input type="radio"/>	4	4	4	4	4												
	Aug <input type="radio"/>	5	5	5	5	5												
	Sep <input type="radio"/>	6	6	6	6	6												
	Oct <input type="radio"/>	7	7	7	7	7												
	Nov <input type="radio"/>	8	8	8	8	8												
	Dec <input type="radio"/>	9	9	9	9	9												
GENDER (Optional)																		
<input type="radio"/> Female																		
<input type="radio"/> Male																		