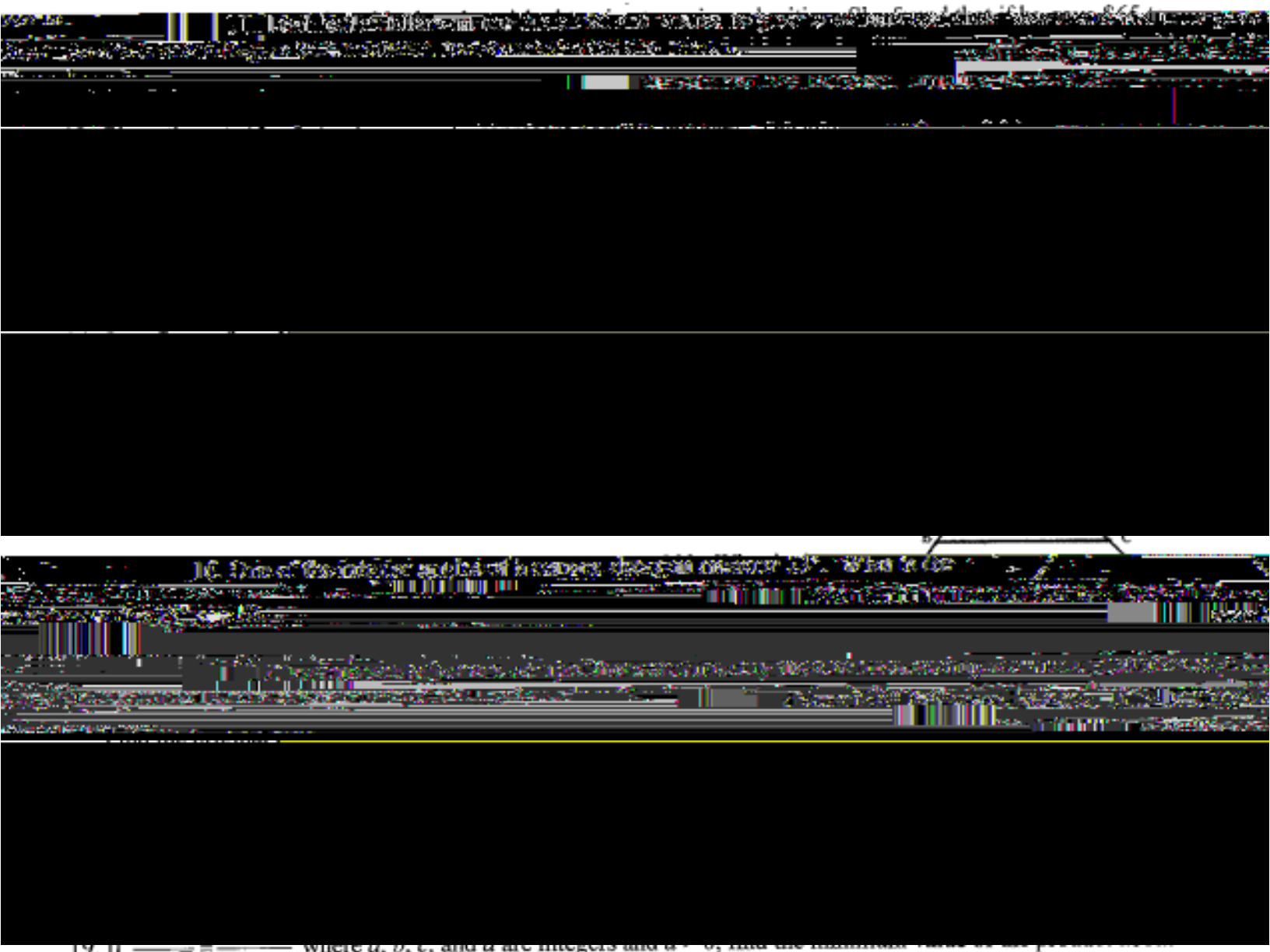
[redacted]

the correct blanks on the answer sheet and in simplest form. **Exact** answers are to be given unless otherwise

[redacted]

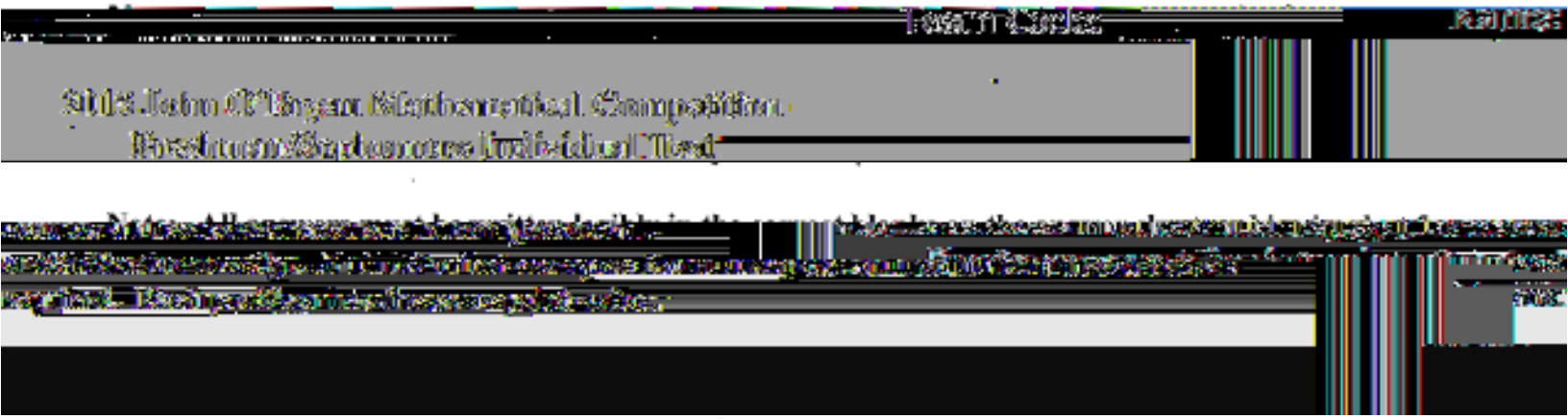
4. In the diagram, $\overline{EB} \perp \overline{AC}$ and points A, B, and C are collinear. $\overline{BF}$

[redacted]



19. If $\frac{a+b\sqrt{3}}{3-\sqrt{3}} = \frac{c}{d}$ where a, b, c, and d are integers and $d \neq 0$, find the minimum value of the positive term

20. Circle A has center $(6, -2)$ and radius 5. Circle B has center $(-3,4)$ and radius 3. Find the exact length of the



1. _____

2. _____

5. _____

6. _____

7. _____

8. _____

10. _____

11. _____

12. _____

15. _____

16. _____

17. _____

18. _____

20. _____

7. 342 Dollar sign optional

8. 3

9. 507

10. 360

17. 1000

18. 1680

19. 324

20. $\sqrt{53}$ Must be in this form