



GALLOP ROUND RULES

1. The Gallop Round will consist of 24 questions to be solved in 60 minutes.
2. The questions will be divided into 8 sets of 3 questions each, and you ***must submit the answers to one set*** before accessing the problems for the next. This means you must strategize when to submit each set (incomplete or not) to ensure you get access to as many questions as possible.
3. Once you submit the answer form for one of the sets, the password for the next set will be on the form submission screen, so make sure you note it down, otherwise you may waste valuable time getting the password from us!
4. The problems will get progressively more difficult, and later problems will be worth more points.
5. Submissions will be scored immediately and a live score of all participating teams will be available during the competition. Prepare for the adrenaline rush!

GALLOP SET 1

10 points per question

[Gallop Set 1 Answer Submission Form](#)

[Gallop Live Scores](#)

1. Mr. Khan runs at a constant rate, and takes 12 seconds to run around a circle with an area of 4π . How long does it take him to run around a circle of area 36π ?
2. One day, Evan was on a stroll and started collecting shells. He collected 2 shells on the first day, 4 shells on the second, 8 on the third, 16 on the fourth, and continued collecting 2^n shells on the n th day. After 9 long days, Evan's grandma asks for all his shells. How many does Evan give his grandma?
3. Square $EVAN$ has point D on side EV such that $ED : DV$ is $3 : 1$. If the ratio of length AD to ND can be written in simplest form as $\frac{a\sqrt{b}}{c}$, what is the value of $\frac{a \cdot b}{c}$ as a simple common fraction?