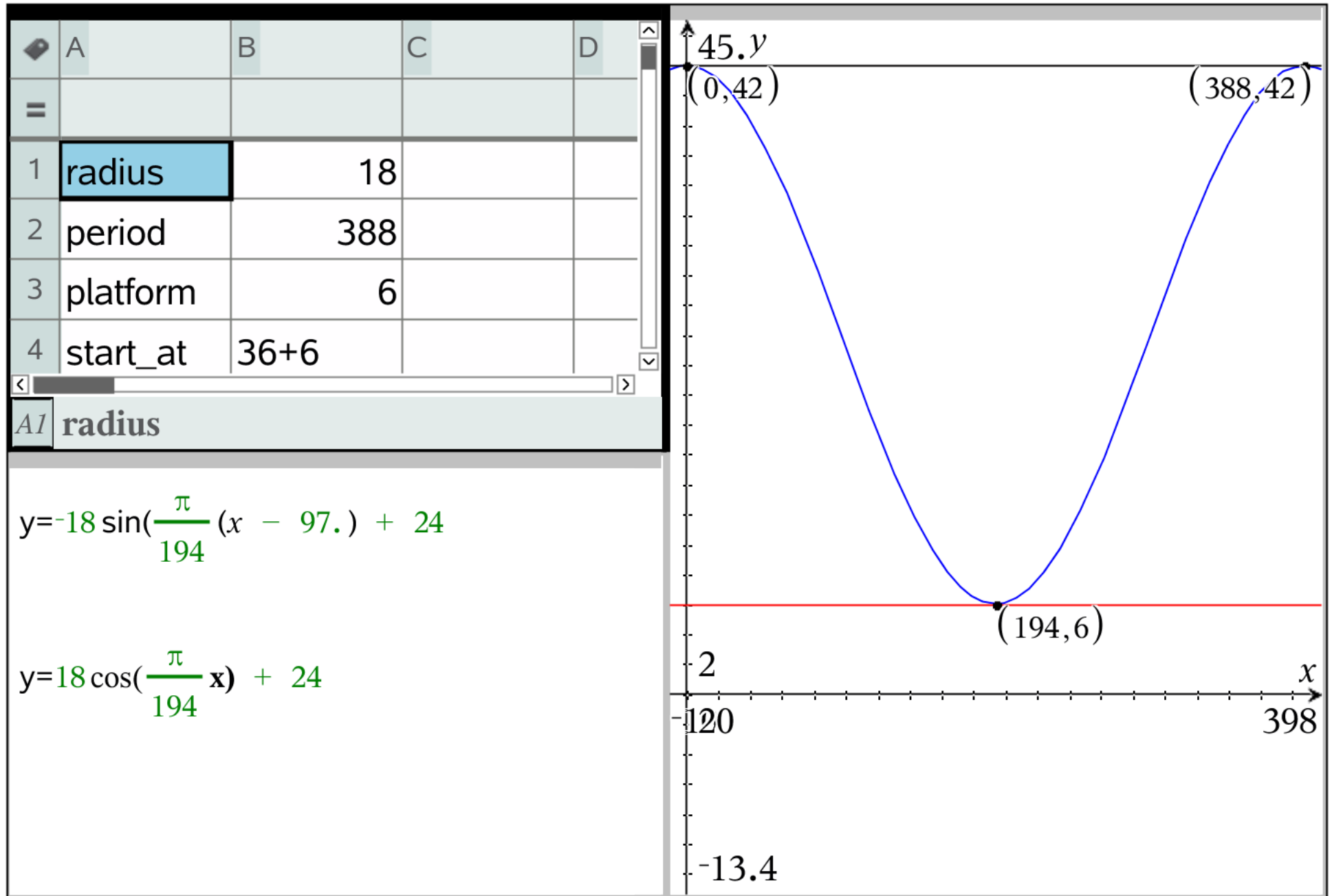
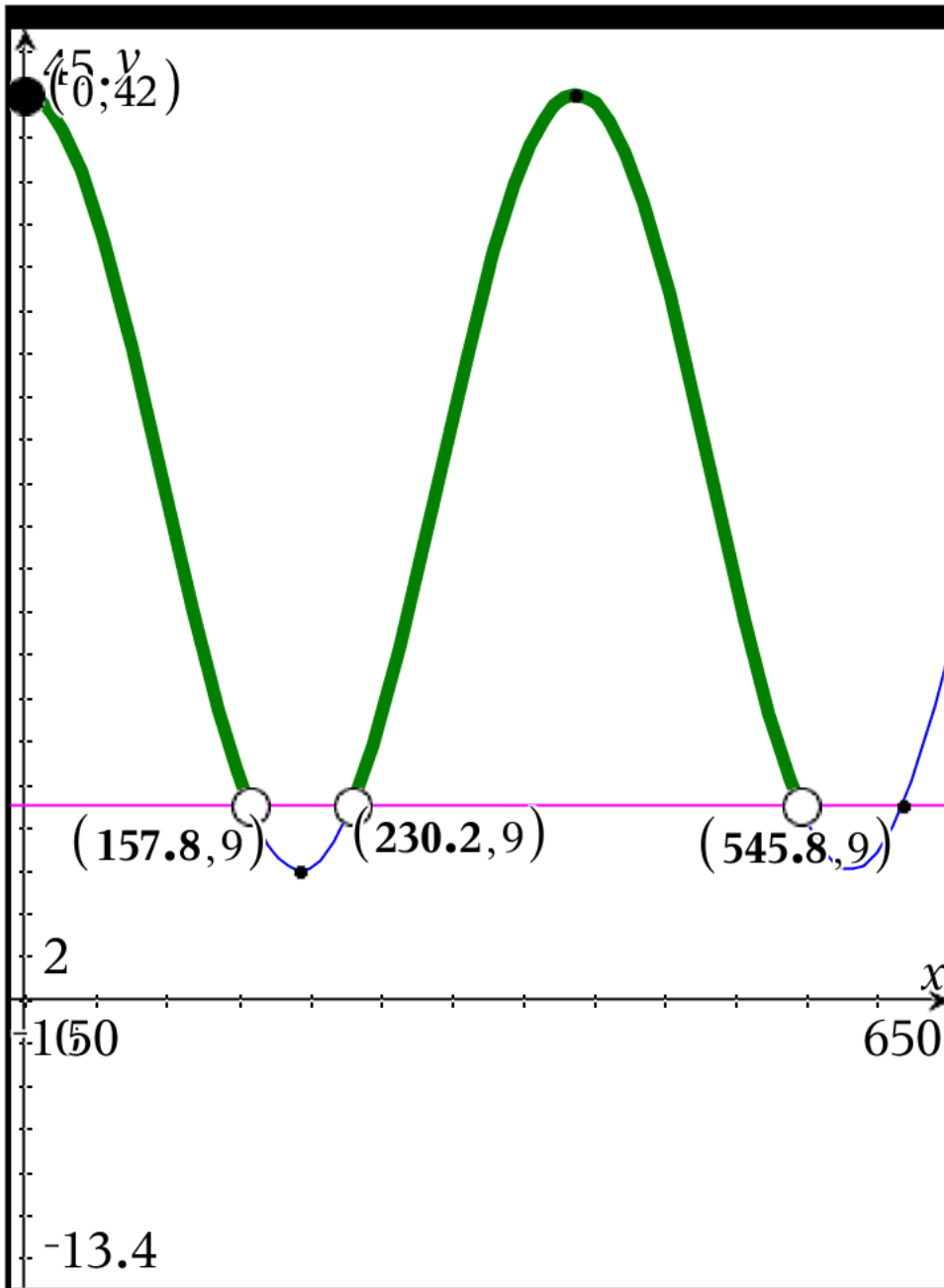


solutions to #9 and #10





$$y = -18 \sin\left(\frac{\pi}{194}(x - 97)\right) + 24$$

$$y = 18 \cos\left(\frac{\pi}{194}x\right) + 24$$

When is the ferris wheel above 9 m above ground in the first 600 seconds

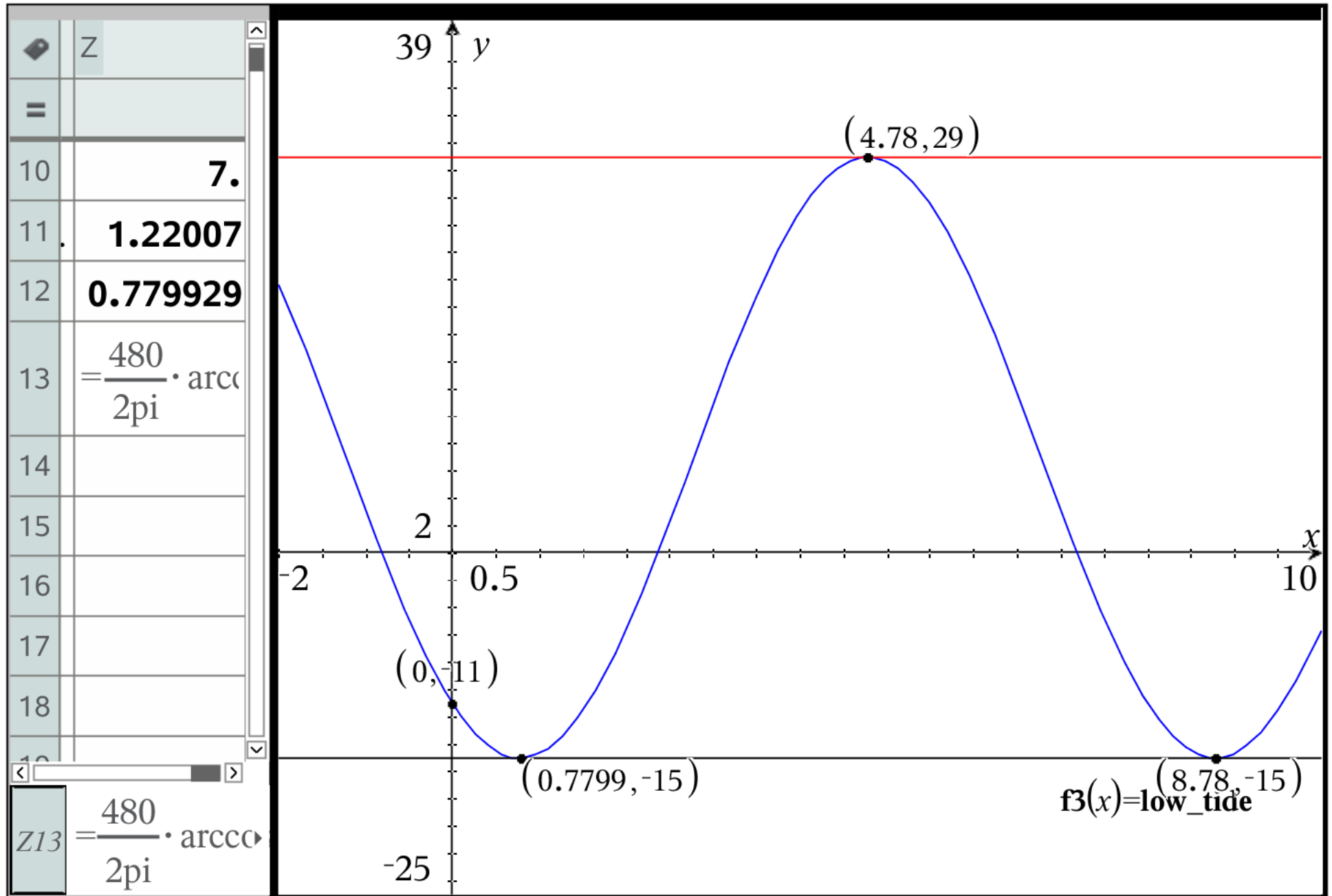
Bracket Notation

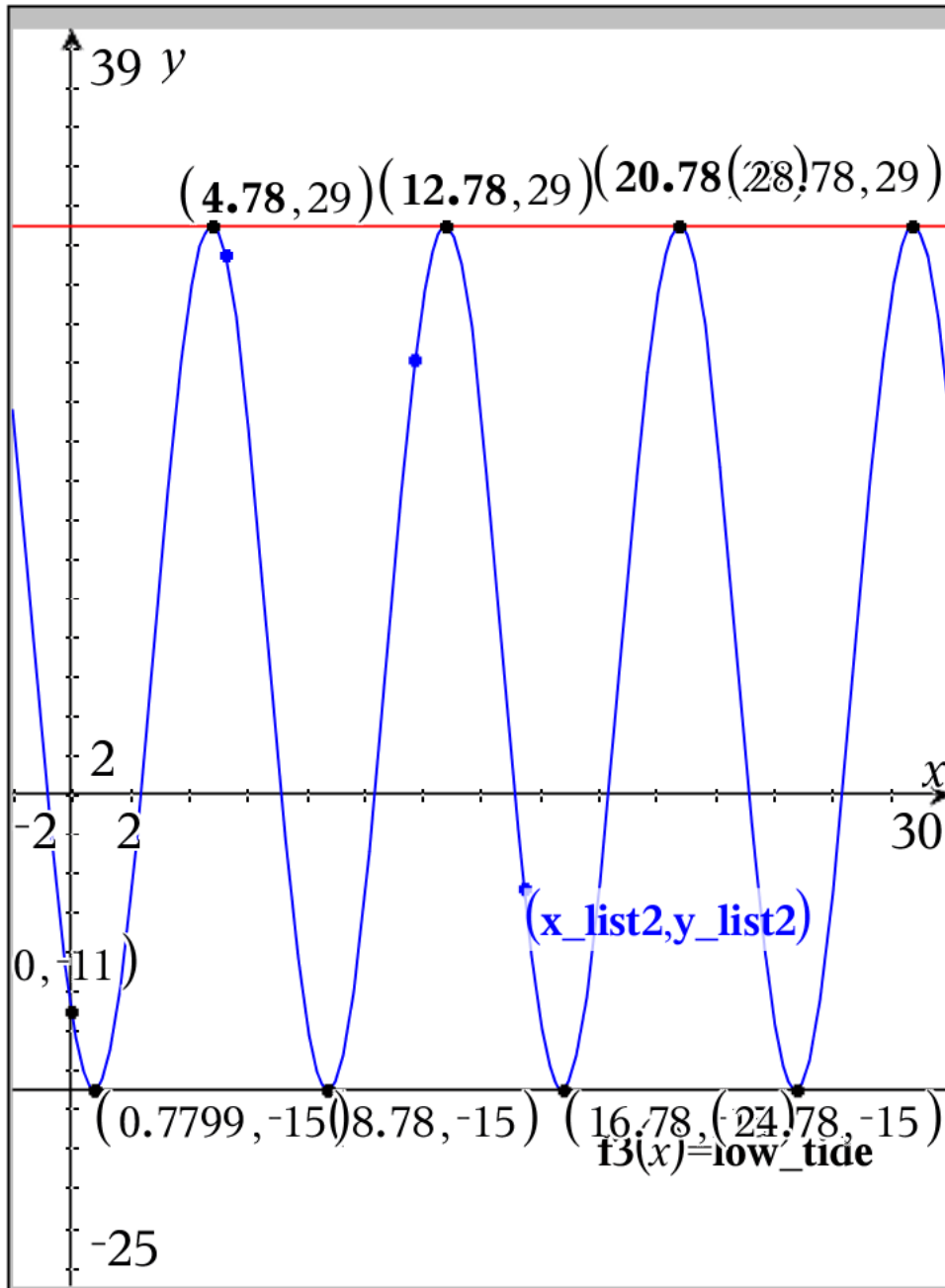
$$[0, 157.833) \text{ or } (230.167, 545.833)$$

Inequality Notation

$$0 \leq x < 157.833 \text{ or } 230.167 < x < 545.833$$

solutions to #11, #12, #13





High Tide occurs

4.77993 hours after 1:00AM

4. and 46.7957 minutes after 1:00AM

is 5: 47 AM

12.7799 hours after 1:00AM

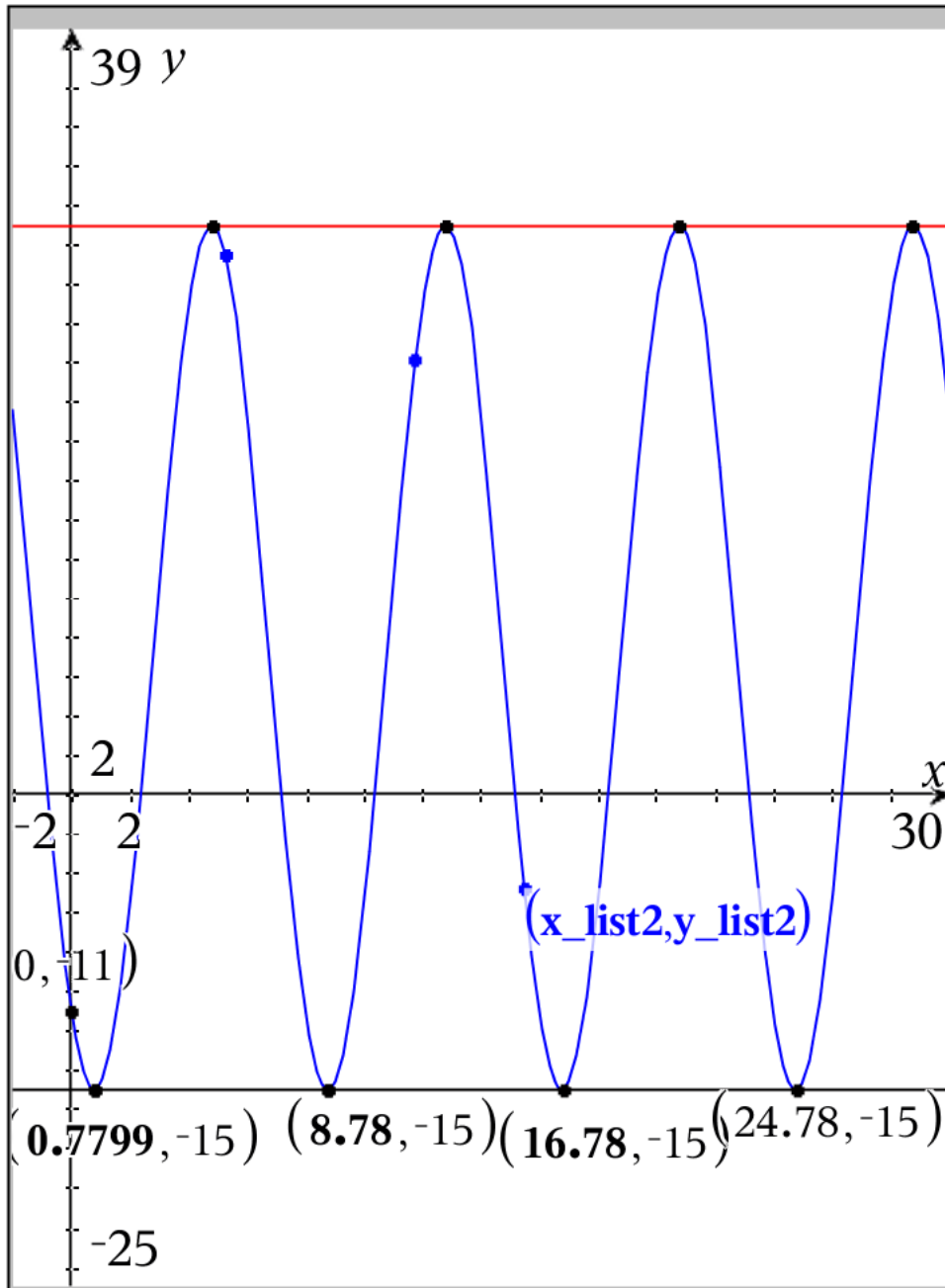
12. and 46.7957 minutes after 1:00AM

is 1: 47 PM

20.7799 hours after 1:00AM

20. and 46.7957 minutes after 1:00AM

is 9: 47 PM



Low Tide occurs

0.779929 hours after 1:00AM

0. and 46.7958 minutes after 1:00AM

is 1: 47 AM

8.77993 hours after 1:00AM

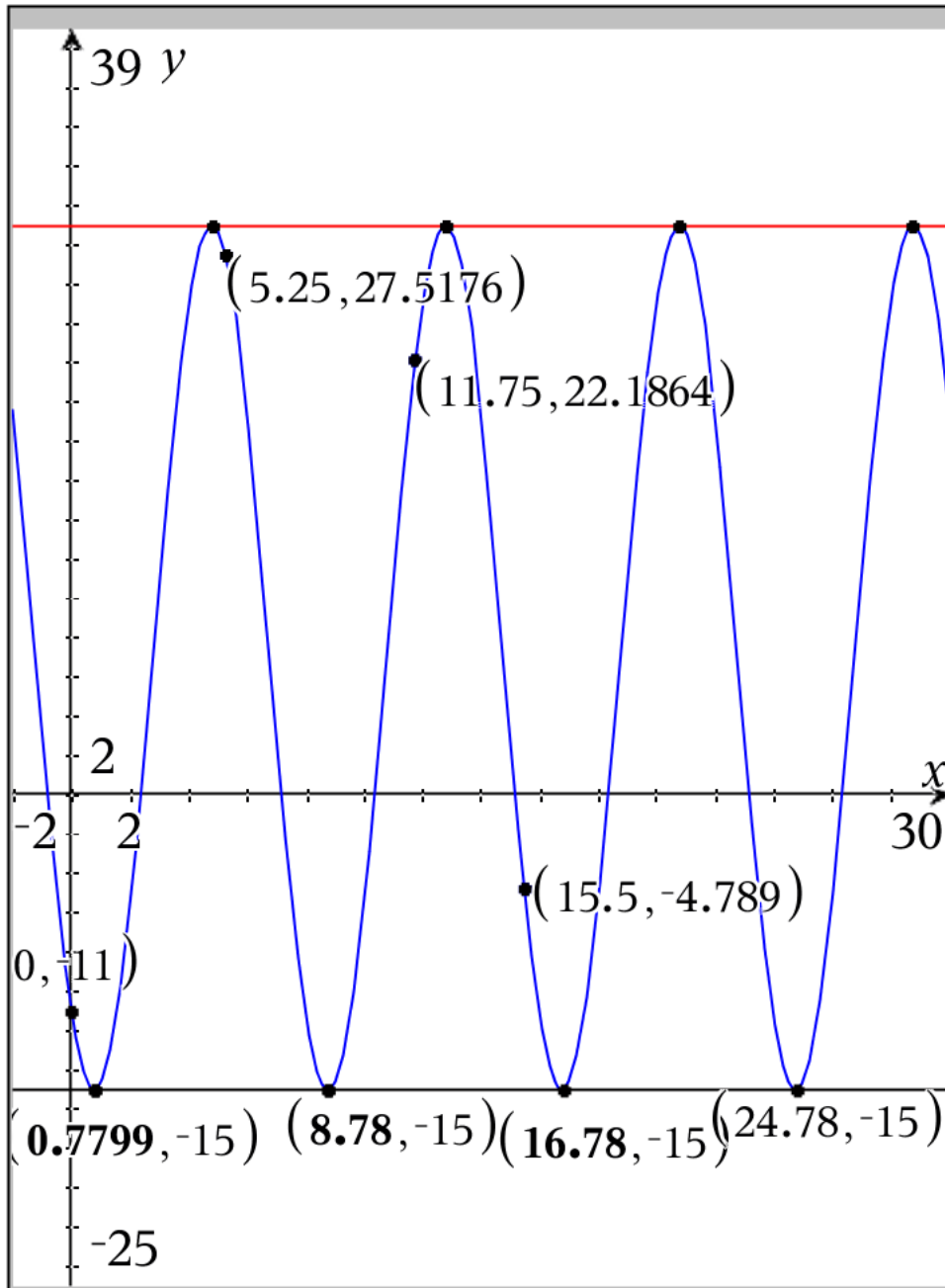
8. and 46.7957 minutes after 1:00AM

is 9: 47 PM

16.7799 hours after 1:00AM

16. and 46.7957 minutes after 1:00AM

is 5: 47 PM



Low Tide occurs

1_1 hours after 1:00AM

$\text{floor}(1_1)$ and $(1_1 - \text{floor}(1_1)) \cdot 60$ minutes
after 1:00AM

is 1:47 AM

1_2 hours after 1:00AM

$\text{floor}(1_2)$ and $(1_2 - \text{floor}(1_2)) \cdot 60$ minutes
after 1:00AM

is 9:47 PM

1_3 hours after 1:00AM

$\text{floor}(1_3)$ and $(1_3 - \text{floor}(1_3)) \cdot 60$ minutes
after 1:00AM

is 5:47 PM