

Apprenticeship Math 12
ASSIGNMENT: Sine Ratio

Name: _____

Date: _____

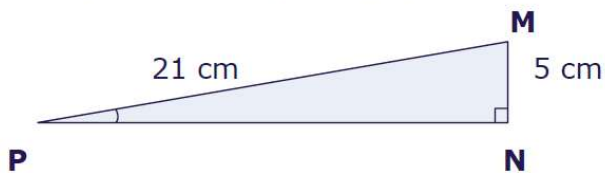
Calculate the sine of the following angles to two decimal places.

1. $\sin 32^\circ$
2. $\sin 86^\circ$

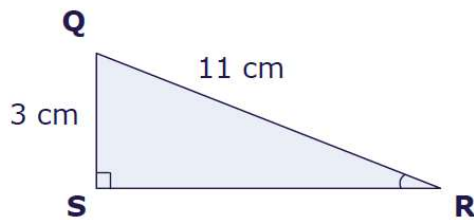
Find $\angle H$ to the nearest degree.

3. $\sin H = 0.521$
4. $\sin H = 0.739$

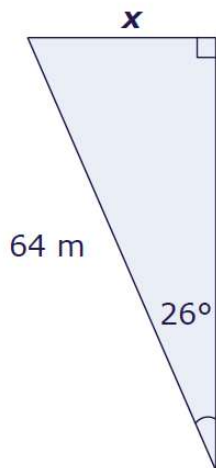
5. Using the following triangle, calculate $\sin P$ to two decimal places.



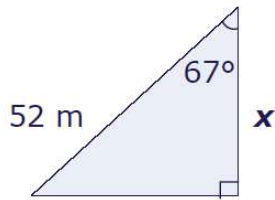
6. Calculate $\angle R$ and $\sin R$ for the following triangle. Round the angle measurement to the nearest degree and calculate $\sin R$ to two decimal places.



7. Find the measurement of the missing side of the triangle to the nearest tenth of a metre.



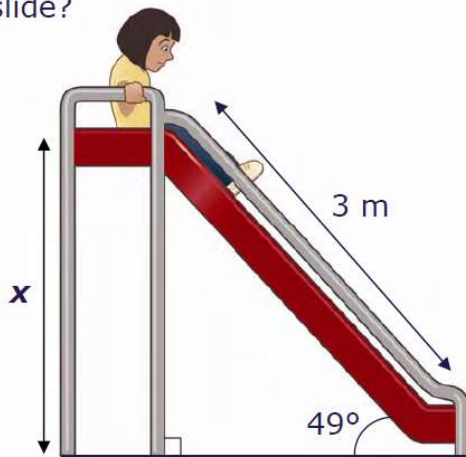
8. Find the measurement of the missing side of the triangle to the nearest tenth of a metre.



9. While on icy roads, a semi truck slid into the ditch and the back part of the semi truck began to tip, hitting a light post and breaking it 2.7 m up the base. The top portion of the light post was now touching the ground. The angle which the top of the light post made with the ground is 62°. How tall to the nearest tenth of a meter was the light post before it was broken?



10. A new playground was built and Sarah was afraid to go down the slide. The slide was 3 meters long and the incline of the slide to the ground was 49°. How high was the slide off the ground to the nearest tenth of a meter? What would you change to make Sarah less afraid to go down the slide?



- | | |
|-----|-----------------------|
| 1. | 0.53 |
| 2. | 1.00 |
| 3. | 31° |
| 4. | 48° |
| 5. | 0.24 |
| 6. | $\sin R = 0.27$ |
| 7. | $\angle R = 16^\circ$ |
| 8. | 28.1 m |
| 9. | 20.3 m |
| 10. | 5.8 m |
| | 2.3 m |