Fill in the blank(s) with the correct answer.



A gear has a radius of 2 cm. The gear turns at a rate of 270 revolutions per minute. What is the angular speed, ω, of the gear in radians per minute?

When the gear turns at 4.5 revolutions per hour, what is the linear speed, v, in meters per day?

https://t.me/Grade10GenAdv

Round each answer to the nearest tenth.

$\omega \approx$ 1. 1696.5 ✓ radians per minute

$v \approx$ 2. 13.6 ✓ meters per day

The tire of a car has a radius of 40 cm. During one trip, the tire turns at a rate of 840 revolutions per minute. What is the angular speed, ω, of the tire in radians per minute? When the wheel turns at 14 revolutions per hour, what is the linear speed, v, in meters per second?



Round each answer to the nearest hundredth.

ATTEMPT 1

https://t.me/Grade10GenAdv

- [x] $v \approx 0.01$ meters per second ✓
- [ ] $v \approx 0.59$ meters per second
- [x] $\omega \approx 5277.88$ radians per minute ✓
- [ ] $\omega \approx 2638.94$ radians per minute
- [ ] $\omega \approx 87.96$ radians per minute
- [ ] $v \approx 0.98$ meters per second

Choose the correct answer from the drop-down menu.



The wheel of a bicycle has a radius of 32 cm. During one trip, the wheel turns at a rate of 210 revolutions per minute. Determine the angular speed, ω, of the wheel in radians per minute. When the wheel turns at 3.5 revolutions per second, what is the linear speed, v, in kilometers per hour?

Round each answer to the nearest tenth.

$\omega \approx$ 1. 1319.5 ✓ radians per minute

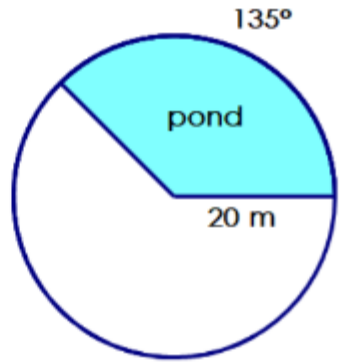
$v \approx$ 2. 25.3 ✓ kilometers per hour

1. 1319.5 ✓

https://t.me/Grade10GenAdv

2. 25.3 ✓

Fill in the blank(s) with the correct answer.



A circular park has a pond area as shown in the image.

What is the approximate area of the pond, rounded to the nearest whole meter?

The area of the pond is approximately 1. 471 ✓ square meters.

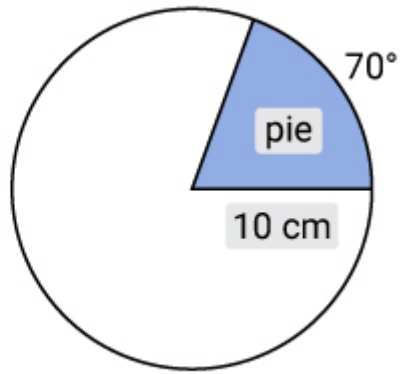
https://t.me/Grade10GenAdv

1. 471 ✓

Drag and drop the correct answer into the space(s) provided.

A pie has one piece remaining as shown in the image.

What is the approximate area of the piece of pie, rounded to the nearest whole centimeter?



The area of this piece of pie is 1. 61 square centimeters.

https://t.me/Grade10GenAdv

6 122 31 19

1. 61

Drag and drop the correct answer into the space(s) provided.

The Ferris wheel has a radius of 22 meters. The Ferris wheel turns at a rate of 480 revolutions per hour. Determine the angular speed, ω, of the Ferris wheel in radians per hour. When the Ferris wheel turns at 8 revolutions per minute, what is the linear speed, v, in kilometers per second?

Round each answer to the nearest hundredth.



$\omega \approx$ 1. 3015.93 ✓ radians per hour

$v \approx$ 2. 0.02 ✓ kilometers per second

https://t.me/Grade10GenAdv

18430.68 | 753.98 | 66.35 | 1507.96 | 18.4