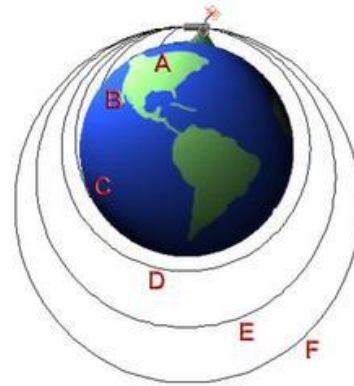
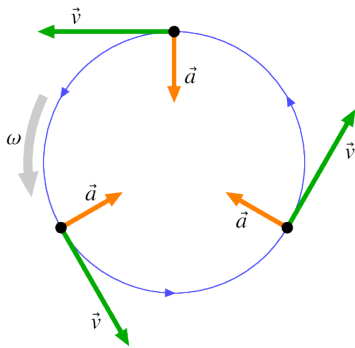


Chapter 6 (Uniform Circular Motion, Gravitation)



Homework Check A (collected by XXXXXXX)

Reading

Please read the following on your own in the OpenStax textbook by the dates given. It will give good context for class discussion. Check off when you have completed them.

- ☐ 6.1 Rotation Angle & Angular Velocity
- ☐ 6.2 Centripetal Acceleration
- ☐ 6.3 Centripetal Force
- ☐ 6.4 Fictitious Forces

Problems and Conceptual Question

Get stamps from your instructor as you complete each of the following problems. The conceptual questions (CQ) require at least one sentence of explanation.

STAMPS WILL NOT BE GIVEN IF WORK IS NOT SHOWN ON A SEPARATE SHEET OF PAPER

Centrip. Force, Acceleration (5 POINTS)	Multiple Force (10 POINTS)

Equations

$$a_C = \frac{v^2}{r}$$

$$\Sigma F_C = ma_C = \frac{mv^2}{r}$$

$$v = \frac{2\pi r}{T}$$

Name: _____

Date: _____

Period: _____

Chapter 6 (Uniform Circular Motion, Gravitation)

Homework Check B (collected on Test Day - XXXXX)

Reading

Please read the following on your own in the OpenStax textbook by the dates given. It will give good context for class discussion. Check off when you have completed them.

- ☐ 6.5 Newton's Law of Universal Gravitation
- ☐ 6.6 Satellites & Kepler's Laws

Problems and Conceptual Question

Get stamps from your instructor as you complete each of the following problems. The conceptual questions (CQ) require at least one sentence of explanation.

Friction (5 POINTS)	Universal Gravitation (5 POINTS)
Satellites (5 POINTS)	

Bonus Problems

P #10	P #15	P #16	P #17

Equations

New Equations

$$a_C = \frac{v^2}{r}$$

$$\Sigma F_C = ma_C = \frac{mv^2}{r}$$

$$v = \frac{2\pi r}{T}$$

$$F_G = \frac{Gm_1m_2}{r^2}$$

$$G = 6.67 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$$

Old Equations

$$\Sigma F = ma$$

$$w = mg$$

$$f = \mu F_N$$