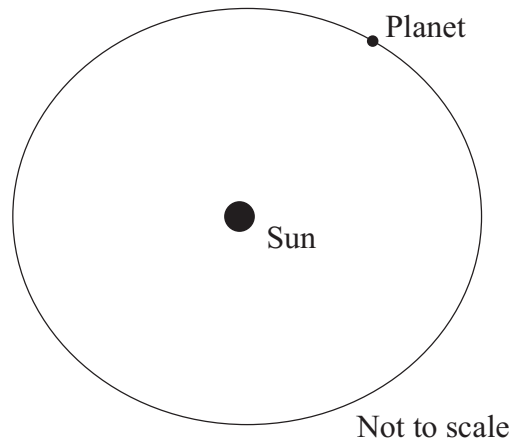


- 3 (a) The diagram shows the orbit of a planet in the Solar System. The orbit is in the shape of a slightly squashed circle.



- (i) What is the name of this orbit shape?

.....
(1 mark)

- (ii) Complete the sentence.

The Sun is at oneof this shape.
(1 mark)

- (iii) What provides the centripetal force which allows the planet to maintain its nearly circular orbit?

.....
(1 mark)

- (iv) What is the relationship between the time it takes each planet in the Solar System to complete its orbit and the planet's average distance from the Sun?

.....
.....
(1 mark)



- (b) Scientists have detected an object orbiting the Sun at a distance of about 17 billion kilometres. Some scientists think that the object, named Sedna, should be classified as a planet. However, some other scientists disagree.

What do you think scientists should do?

Put a tick (✓) in the box next to your answer.

Scientists should decide by voting.

Scientists should wait until they have more evidence.

Give a reason for your answer.

.....

.....

.....

(1 mark)

5

Turn over for the next question

Turn over ►

