

# Calculating Acceleration

USE THE EQUATION TO CALCULATE THE ACCELERATION OF THE FOLLOWING OBJECTS.

ROUND ALL ANSWERS TO 1 DECIMAL POINT. EXAMPLE 8.5M/S<sup>2</sup>

$$\text{Acceleration} = \frac{\text{Final speed} - \text{Initial speed}}{\text{Time}}$$

USE THE INFORMATION IN THE TABLE TO CALCULATE THE ACCELERATION

#	INITIAL SPEED	FINAL SPEED	TIME	ACCELERATION
1.	0 M/S	60M/S	10S	M/S <sup>2</sup>
2.	10M/S	55M/S	15S	M/S <sup>2</sup>
3.	60M/S	40M/S	6S	M/S <sup>2</sup>
4.	20M/S	20M/S	2S	M/S <sup>2</sup>

SELECT THE CORRECT WORDS TO COMPLETE THE SENTENCE.

5. THE WORLD'S FASTEST ROLLER COASTER, THE FORMULA ROSSA CAN REACH A \_\_\_\_\_ OF 240KM/H IN 4.9 SECONDS.

6. THIS MEANS THAT THE FORMULA ROSSA HAS AN \_\_\_\_\_ OF 49M/S<sup>2</sup>.

7. THE RIDE ALSO CHANGES ITS \_\_\_\_\_ AS IT SLOWS DOWN, SPEEDS UP AND CHANGES DIRECTIONS.

RATE



LOOK AT THE GRAPH AND ANSWER THE QUESTIONS



8. WHAT WAS THE AVERAGE SPEED BETWEEN 4 AND 10 HOURS?

9. CALCULATE THE ACCELERATION TIME FROM 0 TO 10 HOURS.

10. LOOK AT THE INFORMATION IN THE GRAPH AND THEN PICK THE OBJECT IN MOTION THAT THIS GRAPH MOST LIKELY REPRESENTS.

A SEA TURTLE

A CHEETAH

