

# 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>

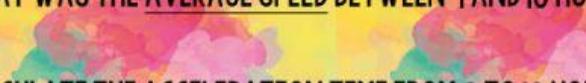
## SELECT THE CORRECT WORDS TO COMPLETE THE SENTENCE.

5. THE WORLD'S FASTEST ROLLER COASTER, THE FORMULA ROSSA CAN REACH A SPEED OF 240KM/H IN 4.9 SECONDS.
6. THIS MEANS THAT THE FORMULA ROSSA HAS AN ACCELERATION RATE OF 49 M/S<sup>2</sup>.
7. THE RIDE ALSO CHANGES ITS POSITION AS IT SLOWS DOWN, SPEEDING UP AND CHANGES DIRECTIONS.



## 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.

