

## DISPLACEMENT-TIME GRAPHS

The graphs below show the displacement of a hypothetical object moving along a straight line. Choose the lettered graph that best represents each of the numbered descriptions. A graph may be used for more than one description or it may not be used at all. Some descriptions may correspond to more than one graph and some may not correspond to any graph at all.

1. The object is moving away from the position  $s = 0$  at a constant velocity
2. The object is moving toward the position  $s = 0$  at a constant velocity
3. The object's velocity is increasing at a uniform rate
4. The object's velocity is decreasing at a uniform rate
5. The object changes direction
6. The object is standing still for an extended period of time
7. The object is momentarily (and only momentarily) at rest on one occasion
8. The object is momentarily (and only momentarily) at rest on two separate occasions

