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## Practice 7-1

Relating Graphs to Events
Each graph represents a situation. Match a graph with the appropriate situation.
a.

Time
b.

Time
c.

Time
d.

Time

1. the height above ground of a skydiver during a dive $\qquad$
2. the temperature of the air during a $24-\mathrm{h}$ period beginning at 9:00 А.м. $\qquad$
3. a jogger gradually increases speed, steadily decreases speed, then steadily increases speed
4. elevator ride up with stops $\qquad$
5. Look at graph b above. Suppose the total time shown is 6 min . Estimate the times when the graph is increasing, decreasing, linear, and nonlinear.

Increasing: $\qquad$ linear:
decreasing:
nonlinear: $\qquad$
Sketch and label a graph of each relationship.
6. the height of a football after it has been kicked
7. the distance traveled by a car that was traveling at 50 mph , but is now stopped by road construction
8. The function table at the right shows the distance in feet that an object falls over time.

| Time (s) | Distance (ft) |
| :---: | :---: |
| 1 | 16 |
| 2 | 64 |
| 3 | 144 |
| 4 | 256 |

