## Speed \& Velocity

Name:
1-10) Fill in the chart with the appropriate value. Make sure your units are right.

| Speed | Displacement | Time |
| :--- | :--- | :--- |
| $50.0 \mathrm{~m} / \mathrm{s}$ |  | 30.5 s |
|  | 75.2 ft | 0.50 min |
| $36.5 \mathrm{mi} / \mathrm{hr}$ | 78.6 mi |  |
| $65.0 \mathrm{~km} / \mathrm{hr}$ |  | 30.0 min |
| $19 \mathrm{~m} / \mathrm{s}$ | 50 cm |  |
|  | 56 m | 45 s |
| $600 . \mathrm{mi} / \mathrm{hr}$ | 3250 mi |  |
|  | 2300 m | 0.45 hr |
| $120 \mathrm{~mm} / \mathrm{s}$ |  | 15 min |
| $25.0 \mathrm{~m} / \mathrm{s}$ | 46.5 km |  |

11) What is the speed of an object that covers 14 km in 12 min ? Express answer in $\mathrm{km} / \mathrm{hr}$.
12) How far does a car get traveling at $23 \mathrm{~m} / \mathrm{s}$ for one hour?
13) A train leaves the station at 0.0 m marker with a constant velocity of $36 \mathrm{~m} / \mathrm{s}$.
a) How many seconds later will the train pass the 1620.0 m marker?
b) What is the velocity of the train in mi/hr
14) At 1:00 pm, a car, traveling at a constant velocity of $94 \mathrm{~km} / \mathrm{hr}$ toward the west, left the school. Where will it be at $3: 30 \mathrm{pm}$ ?
15) Suppose another car left the school at $2: 00 \mathrm{pm}$ at a constant velocity of $60 \mathrm{~km} / \mathrm{hr}$ toward the east. How far apart will the two cars be at $3: 30$ pm?
