### 2.3 Quizlette - How Far - Two Part Problems

Name $\qquad$

1. An airplane reaches a speed of $52.0 \mathrm{~m} / \mathrm{s}$ from rest on a runway that is $890 . \mathrm{m}$ long. What is its speed when it has gone only 100. $m$ down the runway?
A. An airplane reaches a speed of $52.0 \mathrm{~m} / \mathrm{s}$ from rest on a runway that is $890 . \mathrm{m}$ long. (solve for acceleration)

$\square$
B. What is its speed when it has gone only 100. m down the runway? (use the acceleration from part A )

2. A car reaches a speed of $27.0 \mathrm{~m} / \mathrm{s}$ from rest in 6.20 s . What distance did it travel as it accelerated from $18.0 \mathrm{~m} / \mathrm{s}$ to $\mathbf{2 4 . 0} \mathbf{~ m} / \mathrm{s}$ ?
A. A car reaches a speed of $27.0 \mathrm{~m} / \mathrm{s}$ from rest in 6.20 s . (solve for acceleration)

B. What distance did it travel as it accelerated from $18.0 \mathrm{~m} / \mathrm{s}$ to $24.0 \mathrm{~m} / \mathrm{s}$ ? (use the acceleration from part A)

