## Graph Comparison

Name $\qquad$ Date $\qquad$ Block $\qquad$
Fill in the blank squares for each number.

| X vs T | Written Description |  |
| :---: | :---: | :---: | :---: |

$\qquad$ Date $\qquad$ Block $\qquad$

## Velocity

1. Pete is driving down $7^{\text {th }}$ street. He drives 150 meters in 18 seconds. Assuming he does not speed up or slow down, what is his velocity in meters per second?
2. A plane's average speed between two cities is $600 \mathrm{~km} / \mathrm{hr}$. If the trip takes 2.5 hrs . How far does the plane fly?
3. George walks to a friend's house. He walks 750 meters North, then realizes he walked too far. He turns around and walks 250 meters South. The entire walk takes him 13 seconds. What is his velocity for the entire walk?
4. How long will your trip take (in hours) if you travel 350 km at an average speed of $80 \mathrm{~km} / \mathrm{hr}$ ?
5. How far (in meters) will you travel in 3 minutes running at a rate of $6 \mathrm{~m} / \mathrm{s}$ ?

## Acceleration

1. A roller coaster is moving at $25 \mathrm{~m} / \mathrm{s}$ at the bottom of a hill. Three seconds later it reaches the top of the hill moving at $10 \mathrm{~m} / \mathrm{s}$. What was the acceleration of the coaster?
2. A car traveling at $15 \mathrm{~m} / \mathrm{s}$ starts to decelerate steadily. It comes to a complete stop in 10 seconds. What is the car's acceleration?
3. A train moves from rest to a speed of $25 \mathrm{~m} / \mathrm{s}$ in 30.0 seconds. What is its acceleration?
4. A meteoroid changed velocity from $1.0 \mathrm{~km} / \mathrm{s}$ to $1.8 \mathrm{~km} / \mathrm{s}$ in 0.03 seconds. What is the acceleration of the meteoroid?
