

## Homework Distance, Rate and Time

1) An airplane takes off and climbs at a constant rate. The table shows the altitudes the plane traveled.

| Time (minutes) | Altitude (feet) |
|----------------|-----------------|
| 1              | 1200            |
| 1.5            | 1800            |
| 2              | 2400            |
| 2.5            | 3000            |

2) A train took off from the station and travels at a constant speed. The table shows the distances the train traveled.

| Distance (kilometer) | Time (hours) |
|----------------------|--------------|
| 81.25                | 0.25         |
| 162.5                | 0.5          |
| 1300                 | 4            |
| 3250                 | 10           |

a) Determine the airplane's rate in feet per minute.

b) Write an equation to determine the distance traveled after an amount of time has elapsed.

c) Determine how far the plane will travel after 14 minutes.

a) Determine the train's rate in kilometers per hour.

b) Write an equation to determine the distance traveled after an amount of time has elapsed.

c) Determine how many hours it will take the train to travel 2,275 kilometers.

3) A boat leaves the dock and travels at a constant speed. The table shows the distances the boat traveled.

| Time (hours) | Distance (miles) |
|--------------|------------------|
| 0.25         | 6.75             |
| 0.5          | 13.5             |
| 2            | 54               |
| 5            | 135              |

4) A helicopter leaves its landing pad and travels at a constant rate. The table shows the distances the helicopter traveled.

| Time (hours) | Distance (kilometers) |
|--------------|-----------------------|
| 0.25         | 62.5                  |
| 0.75         | 187.5                 |
| 1.5          | 375                   |
| 4            | 1000                  |

a) Determine the boat's rate in miles per hour.

b) Write an equation to determine the distance traveled after an amount of time has elapsed.

c) Determine how many miles the boat will travel after 1.5 hours.

a) Determine the helicopter's rate in kilometers per hour.

b) Write an equation to determine the distance traveled after an amount of time has elapsed.

c) Determine how many hours it will take the helicopter to travel 72 kilometers.