

Name _____

The Rotation Equation Answer Key

1. **New York time = 3:00 PM – 5 hours = 10:00 AM**
2. **Los Angeles time = 8:00 PM – 3 hours = 5:00 PM**
3. **New Delhi time = 9:00 AM + 5.5 hours = 2:30 PM**
4. **Sydney time = 11:00 PM + 1 hour = 12:00 AM (next day)**
5. **London time = 4:00 PM – 2 hours = 2:00 PM**
6. **Los Angeles time = 12:00 AM – 8 hours = 4:00 PM (previous day)**
7. **Because Earth rotates on its axis, only part of the planet faces the Sun at any given time. As Earth spins, different locations move into or out of sunlight, creating time differences.**