

**Lines and Planes-True or False**  
(From Stewart's *Calculus*)

1. Two lines parallel to a third line are parallel.
2. Two lines perpendicular to a third line are parallel.
3. Two planes parallel to a third plane are parallel.
4. Two planes perpendicular to a third plane are parallel.
5. Two lines parallel to a plane are parallel.
6. Two lines perpendicular to a plane are parallel.
7. Two planes parallel to a line are parallel.
8. Two planes perpendicular to a line are parallel.
9. Two planes either intersect or are parallel.
10. Two lines either intersect or are parallel.
11. A plane and a line either intersect or are parallel.
12. Three planes may or may not intersect in a point.
13. Three planes may or may not intersect in a line.
14. Three planes need not have a mutual intersection.