Two-force support—One unknown Smooth surface——One unknown two-force member resists translation smooth surface resists translation tension or compression cable (or other roller on force perpendicular body contacts force in-line with two-force member) smooth surface two-force member smooth surface to surface -Three reactions Free-axle bearing —Four unknowns-Ball & socket ball resists translation but is free to rotate axle free to slide & rotate F_x two reaction forces and two reaction moments three reaction ball stays in socket journal bearing force components perpendicular to axle & is free to rotate Confined-axle bearing -Five reactions axle or pin cannot slide but is free to rotate two reaction forces and two reaction moments perpendicular to axle, thrust bearing smooth pin hinge plus axial reaction force Square-shaft bearing —Five reactions— Fixed support ——Six reactions body cannot slide & cannot rotate square shaft free to slide, but cannot rotate C_{r} two reaction forces welded, bolted, three reaction forces and or anchored to square shaft perpendicular to axis, stationary material three reaction moments journal bearing three reaction moments