

Solutions

2.1 B State what each model includes and omits. Compare tests with the same load, geometry and conditions. Iteration means using evidence to revise a solution and testing the revision against the original success criteria.

2.2 $\text{reduction} = (10 - 6) / 10 \times 100 = 40\%$.

2.3 False. Stiffness is resistance to elastic deformation; strength concerns failure stress. A visually accurate model need not reproduce material behaviour.

2.4 prototype. prototype means A developing version used to test a solution.

3.1 Reduction 37.5% supports greater stiffness at that load. Controlled load-deflection and supervised strength evidence test different properties. Record geometry, supports and material.