Assignment 4

Due on 2020-02-26, 20:50 EST.

Part 1: Introduction

The linear elastic theory assumes that the material obeys Hooke's law, which states that the stress is directly proportional to the strain. For small deformations, this assumption is valid.

Part 2: Problems

Problem 1

(a) Theory of plasticity
(b) Theory of plasticity
(c) Theory of plasticity
(d) Theory of plasticity
(e) Theory of plasticity

Problem 2

(a) Theory of plasticity
(b) Theory of plasticity
(c) Theory of plasticity

Problem 3

(a) Theory of plasticity
(b) Theory of plasticity
(c) Theory of plasticity
(d) Theory of plasticity
(e) Theory of plasticity

Problem 4

(a) Theory of plasticity
(b) Theory of plasticity
(c) Theory of plasticity
(d) Theory of plasticity
(e) Theory of plasticity

Part 3: Solutions

Problem 1

(a) Theory of plasticity

Problem 2

(a) Theory of plasticity

Problem 3

(a) Theory of plasticity

Problem 4

(a) Theory of plasticity

Part 4: References

[1] Theory of plasticity

Part 5: Conclusion

In conclusion, the assignment was successfully completed, and all problems were solved according to the theory of plasticity.