

Problem 1.

- a) B.
- b) C.
- c) C.
- d) B.

Problem 2.

A.

Problem 3.

D and E.

Problem 4.

- a) No.
- b)
- c) 10.4 m
- d) See solution document for sketch.

Problem 5.

B and H.

Problem 6.

B.

Problem 7.

A, D and E.

Problem 8.

G.

Problem 9.

- a) See solution document for sketch.
- b) 57.5 s

Problem 10.

D.

Problem 11.

70.7% of the time.

Problem 12.

a) $v = \sqrt{2gR}$

b) $v = \sqrt{gR}$