

*Le risposte corrette sono in italico.*

- (1) Consider the assets  $(103, 103, 103)'$ ,  $(92, 107, 101)'$  and  $(98.6, 104.6, 102.2)'$  whose prices are 92.70, 88.20, 91.900, respectively. Is the third asset replicable? Do you have an arbitrage opportunity on the third asset?
  - (a) No, it's not replicable. Hence, there is an arbitrage opportunity.
  - (b) No, it's not replicable and there is NO arbitrage opportunity.
  - (c) *Yes, it's replicable and there is an arbitrage opportunity.*
  - (d) Yes, it's replicable but there is NO arbitrage opportunity.
- (2) Consider the assets  $(105, 105, 105)'$ ,  $(91, 94, 104)'$  and  $(39.2, 39.8, 41.8)'$  whose prices are 94.50, 85.05, 35.910, respectively. Is the third asset replicable? Do you have an arbitrage opportunity on the third asset?
  - (a) No, it's not replicable. Hence, there is an arbitrage opportunity.
  - (b) No, it's not replicable and there is NO arbitrage opportunity.
  - (c) Yes, it's replicable and there is an arbitrage opportunity.
  - (d) *Yes, it's replicable but there is NO arbitrage opportunity.*
- (3) Consider the assets  $(106, 106, 106)'$ ,  $(118, 96, 109)'$  and  $(107.4, 104, 107.6)'$  whose prices are 95.40, 94.25, 95.335, respectively. Is the third asset replicable? Do you have an arbitrage opportunity on the third asset?
  - (a) No, it's not replicable. Hence, there is an arbitrage opportunity.
  - (b) *No, it's not replicable and there is NO arbitrage opportunity.*
  - (c) Yes, it's replicable and there is an arbitrage opportunity.
  - (d) Yes, it's replicable but there is NO arbitrage opportunity.

