Further readings and templates

# Online Chapter 19 - answers to numerical reasoning questions

## Answers to numerical reasoning questions

Set 1

1. If my flight to Shanghai leaves the gate at Dubai Airport at 6 a.m., what time would I expect to arrive at my gate in Shanghai Airport?

a. 12.30 p.m.

b. 12.30 a.m.

c. 7.30 a.m.

d. 12 p.m.

2. By what percentage is the flying time from Dubai to Shanghai longer than the flight from Dubai to New York?

a. 1.6%

b. 85%

c. 12%

d. 16%

3. If I am flying from New York to Beijing, I can expect a headwind to add 20% onto my flying time. So, what is my total time from leaving the gate in New York to arriving at my gate in Beijing?

a. 15 h 40 min

b. 12 h 30 min

c. 18 h 45 min

d. 16 h 15 min

4. I need to fly from Beijing to New York via a connecting flight in Dubai which will leave two hours later. My flight will leave Beijing at 4.30 p.m. Assuming no delays and no need to queue for immigration or collect baggage in Dubai, what time can I expect to arrive at the gate in New York?

a. 9.35 a.m. the next day

b. 9 p.m. the same day

c. 10.35 p.m. the same day

d. 6.35 p.m. the next day

Set 2

5. If we measure the ratio of expenses to salary as the percentage of salary spent on expenses, whose spending is the least efficient?

a. Martin

b. Sarah

c. Paul

d. Bill

(Sarah’s is 57%, higher than Martin’s at 38%, Bill’s at 53.5% and Paul’s at 46%.)

6. Martin’s investments are in an investment fund where the rate will not change for five years. If Martin saves all that he does not spend into an investment fund, how much is he likely to see in that fund after three years of growth?

a. £8650.34

b. £9627.66

c. £27,377.25

d. £10,157

(£8650 is just unspent income, £9627.66 is after two years, £27,377 is just 3 × £8650, and £10,157 is £9627.66 × 1.055, and so is the amount after three years of growth.)

7. If Martin saves all that he does not spend into an investment fund, but the other friends only invest 60% of what they do not spend into similar funds, what is the situation regarding the four friends’ investments after the first anniversary?

a. Martin has more in his investment fund than Paul.

b. Paul has more invested than Sarah.

c. As a percentage of his income, Bill has more invested than Paul.

d. Martin has less in his investment fund than Bill.

(The order and amounts are: Martin has £9125, Paul £9299, Sarah £10,680 and Bill £6315. As a percentage of his salary, Bill has 33% in his fund, whereas Paul has 28%.)

8. During her second year of work, Sarah falls sick and is unable to receive a salary for half a year. However, during her first year, she was able to invest 85% of her net income (income minus expenses) into her investment fund. Assuming a 3% increase in salary and a reduction to save only 35% of her net income but no other changes, what would her investment (as a percentage of her total income over that period) be?

a. 32%

b. 49.7%

c. 37%

d. 69%

(First year: Sarah saves £16,985, invests £14,437 and has a fund of £15,130. In her second year, she saves just £2548, invests £891.98 (35%) and adds that to the £15,130, giving £16,021. The interest on the combined amounts gives her £16,791. Her salary for the second year is £30,657, half of which is £15,328. So the total salary for the two years is £45,093. As a percentage of her salary, £16,791 represents 37%.)