

## Economics 1 Answer Topics

### Week 6

Exercises 6.2b 6.3a 6.4d 6.5c 6.7d 6.14c 6.15f 6.16b 6.17b 6.18c

#### Exercise 6.11

- Downward-sloping line: vertical intercept is 8; horizontal intercept is 12.
- 9 books and 2 CDs.
- Both intercepts are now 8. Peter is worse off.

#### Exercise 6.12

- $Y = 9 - 2X$ . Downward-sloping line: vertical intercept is 9; horizontal intercept is 4.5.
- $X = 2, Y = 5$ . It is on the budget line, and  $MU_X/p_X = 4 = MU_Y/p_Y$ .
- From X:  $20 + 16 = 36$ ; from Y:  $16 + 14 + 13 + 10 + 8 = 61$ ; total = 97.
- $\text{€}6 \times 2 + \text{€}2 \times 5 = \text{€}22$ .

#### Exercise 6.13

- $Y = 3 - X$ .
- One cup of tea, two biscuits.
- MRS = 1.

d.I) She will substitute biscuits for tea, as tea is now more expensive relative to biscuits; and, assuming both goods are normal, consume less of both because her purchasing power has fallen. So she will definitely drink less tea, but we do not know whether she will eat more or fewer biscuits, as the two effects work in opposite directions in the case of biscuits.

d.II) Not much: biscuits and tea are likely to be complementary to some degree, so the substitution effect will be small. If she spends a small fraction of her income on tea the income effect will be small as well.

d.III) It will increase. In this case income and substitution effects will work in the same direction.