

- 6 (a) An athlete monitored their heart rate and breathing rate before, during and after vigorous exercise.

Fig. 6.1 shows the results.

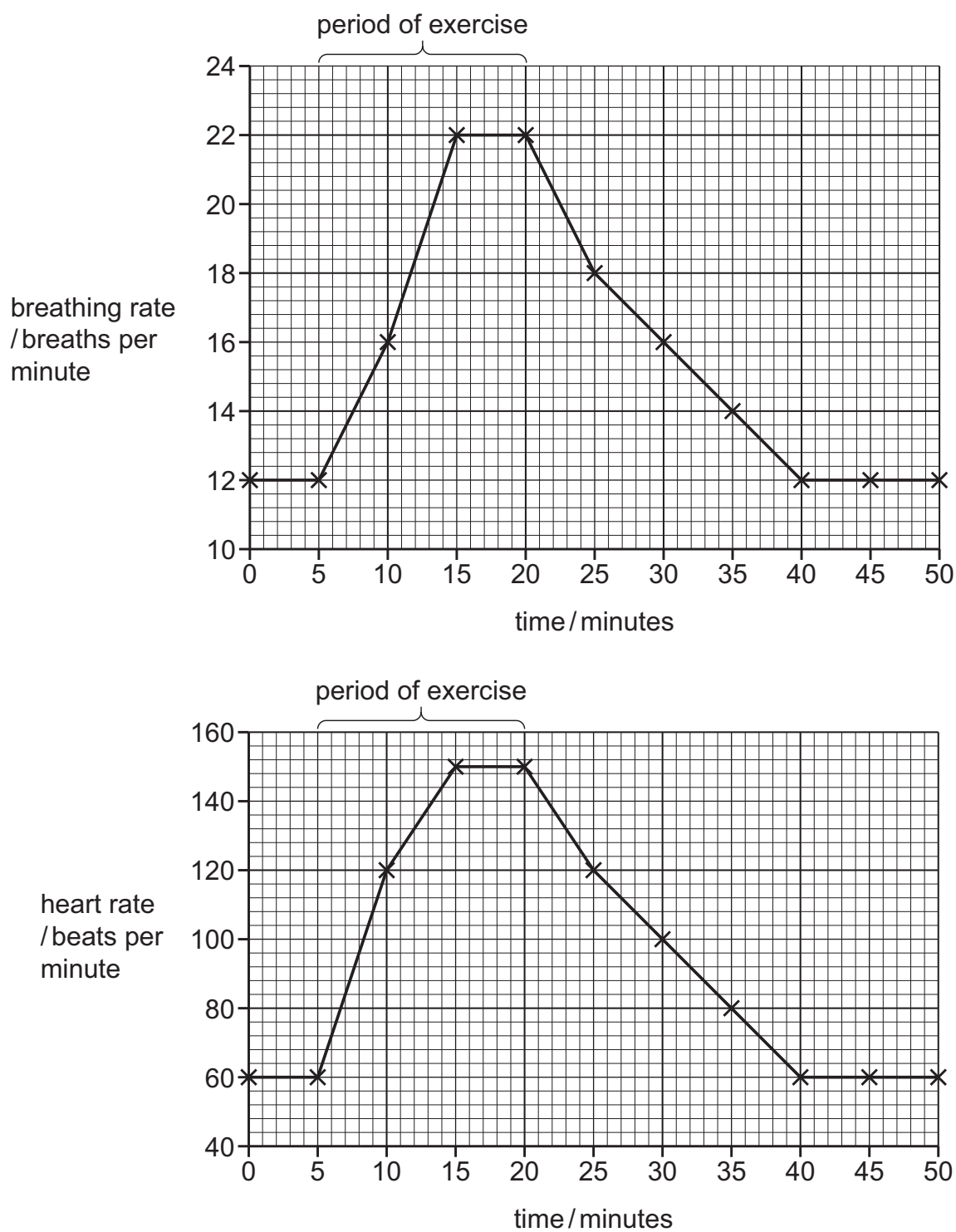


Fig. 6.1

Complete the sentences to describe **and** explain the results shown in Fig. 6.1.

After exercise, it takes minutes for the athlete's breathing rate to return to its resting rate.

The heart rate decreases by beats per minute between 20 and 40 minutes.

The heart rate and breathing rate do not immediately return to their resting rates because anaerobic respiration has occurred.

Lactic acid has built up in causing an oxygen

The heart rate remains high to transport lactic acid to the

The breathing rate remains high to supply for the respiration of lactic acid.

[7]

- (b) The carbon dioxide produced during exercise is excreted. Urea is another substance that is excreted.

(i) State the name of the organ that produces urea.

..... [1]

(ii) State the name of the organ that excretes urea.

..... [1]

- (c) State the balanced chemical equation for anaerobic respiration in yeast.

..... [2]

- (d) State **one** food product that is made using anaerobic respiration in yeast.

..... [1]

[Total: 12]