

HOME EXERCISE 8

Set out carefully all appropriate working.

Do **not** use a calculator in questions 1, 2, 3 or 4.

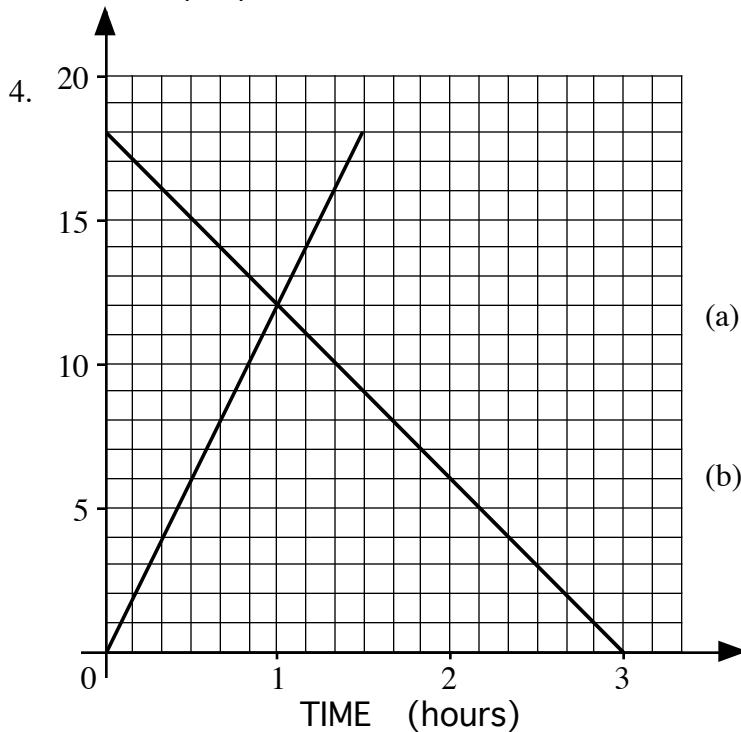
Use a calculator in question 5.

1. Remove the brackets and simplify: $(3x - 2)(x - 4)$ (2)

2. If $a = -4$ and $b = -3$, evaluate: $a \square b$ (1)

3. Remove the brackets and simplify: $5(t + 4) \square 3(t \square 2)$ (2)

DISTANCE (km)



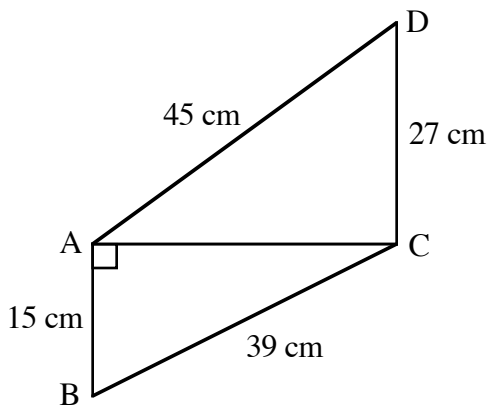
The graphs show the journeys of a runner and a walker.

They are travelling between two towns in opposite directions.

(a) How much further has the runner still to travel when he passes the walker? (1)

(b) Calculate the speed of:
 (i) the runner (3)
 (ii) the walker. (2)

5.



(a) Triangle ABC is right-angled as shown. Calculate the length of side AC. (3)

(b) Show that triangle ACD is right-angled. (3)

(c) Calculate the area of quadrilateral ABCD. (3)

Total 20 marks