

HOME EXERCISE 6

Set out carefully all appropriate working.

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

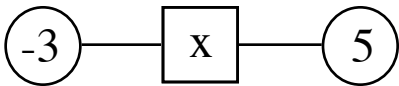
Use a calculator in questions 5 and 6.

1. Evaluate: $\frac{4}{5} \div \frac{6}{7}$ (2)

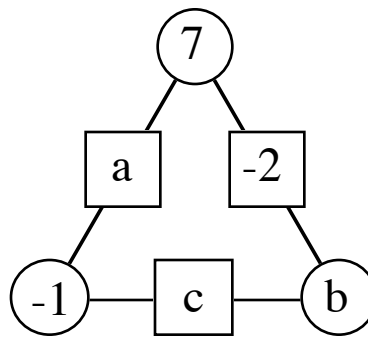
2. Evaluate: $16 \cdot 3 \square 2 \cdot 6 \square 3$ (2)

3. The number in the square is the sum of the numbers in the circles on either side of it.

For example,



since $-3 + 5 = 2$, then $x = 2$.

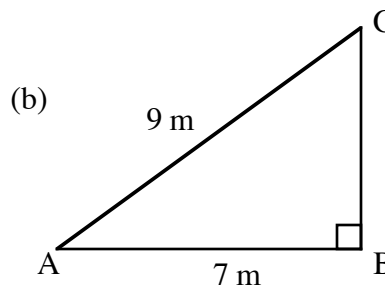
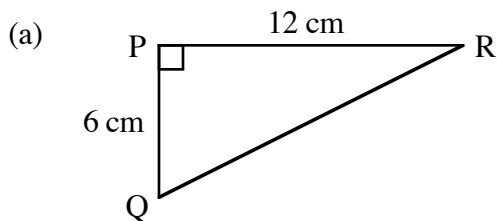


Find the values of a, b and c in the triangle. (3)

4. The normal price of a toaster is £30.
In a sale the price is reduced to £24.
Calculate the percentage reduction in the sale. (3)

5. A car is allowed to travel at a maximum speed of 70 miles per hour on the motorway.
A driver left on a 65 mile motorway journey at 15 30, arriving at 16 25.
Did the driver break the law? (4)

6. The triangles shown are right-angled.



Calculate the missing lengths, correct to one decimal place. (6)

Total 20 marks