

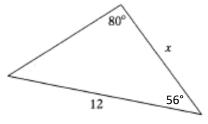


Show all working – Calculator ONLY required for Qu 2 & 3.

Marks

1. Simplify fully:
$$\frac{2x^2-8}{2x^2+x-6}$$
 (3)

2. Find the length of *x*.



(4)

3. Entrance fees to a show for 3 adults and 2 children totals £61.35.

For 2 adults and 5 children the cost is £69.50.

(5)

4. Solve: **a)**
$$3(2x-5)+7 \ge 2(5x+4)$$

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 (b) $\frac{5}{3}x+\frac{7}{4}=\frac{3x-1}{2}$ **(6)**

5. A function is defined as $h(a) = 33 - 6a^2$

a) Evaluate h(-3).

b) Given that
$$h(t) = 9$$
, find the value of t.

(4)

6. Make x the subject of:
$$R = A^2(x - 3y)$$

(3)