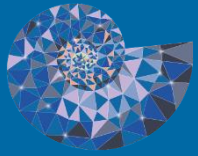


Solving modulus problems



Gold

Let:

$$f(x) = 2|x - 4| + 1, \quad g(x) = 7 - x \text{ and } h(x) = -x^2 + 10x - 22$$

- a** Find all of the possible values for x such that $f(x) = g(x)$.
- b** Find all of the possible values for x such that $f(x) = h(x)$.

Silver

Let:

$$f(x) = -4|x| + 5 \text{ and } g(x) = \frac{1}{2}x + 3$$

Find all of the possible values for x such that $f(x) = g(x)$.

Bronze

Given that:

$$f(x) = 2|x| + 3$$

state the range of f .