

- 8**    **(a)** State the set of values for which  $|x| > x$ . **[1]**
- (b)** You are given that  $n$  is an integer such that  $|n| \leq 9$ .
- (i)** Find the maximum value of  $|2n - 1|$ . **[1]**
- (ii)** Find the minimum value of  $|2n - 1|$ . **[1]**
- (c)**    **(i)** Solve the equation  $|\frac{1}{2}x - 1| = |2x - 3|$ . **[3]**
- (ii)** Explain why the equation  $|\frac{1}{2}x - 1| = 2x - 3$  has only one solution, and state the value of this solution. **[1]**