Practice worksheet | Algebra

Checking solutions and domains

Name: _____ Date: _____

6 questions | 14 marks

1. State the real domain of $f(x) = 1/(x + 6)$. [2 marks]

2. State the real domain of $g(x) = \sqrt{3 - x}$. [2 marks]

3. State the real domain of $h(x) = \sqrt{x}/(x - 9)$. [2 marks]

4. Check whether $x = 4$ solves $3/(x - 1) = 1$. [2 marks]

5. A bus hire cost is $C = 180/n$ dollars per passenger, with at most 30 passengers. State a sensible domain. [3 marks]

6. A calculation for $1/(x - 2) = 1$ gives $x = 3$. Another student says $x = 2$ is also possible because multiplying by $x - 2$ removes the denominator. Decide both claims. [3 marks]