

1.1 Do Now: Function notation practice. Write answers clearly in the box.

1. The function f is defined by $f(x) = 7x - 4$:

- a) Find the values of $f\left(\frac{1}{2}\right)$ and $f(-5)$.
- b) Find the values of x such that $f(x) = 10$.
- c) Find the values of x such that $f(x) = x$.
- d) Find the values of x such that $f(x) = f(37)$.

Total marks = 6

Mastery topic: Algebraic solution

Solve each equation for x , rounding to the nearest hundredth.

10. $\tan 75^\circ = \frac{x}{15}$

12. $\sin 46^\circ = \frac{x}{3.5}$

11. $\tan 26^\circ = \frac{4}{x}$

13. $\cos 35^\circ = \frac{x}{10}$

Solve for x , rounding to the nearest whole degree.

14. $x = \tan^{-1}\left(\frac{2}{3.5}\right)$

15. $\tan x^\circ = \frac{17}{9}$