SUBSTITUTION IN FORMULAE

Use the value of π on your calculator. Give your answer correct to one decimal place when needed.

1 If $P = 2(l + b)$, find the value of P when $l = 20$, $b = 12$.

3 If $F = ma$, find F when $m = 50$, $a = 0.2$.

4 If $F = \dfrac{9C}{5} + 32$, find: **(a)** F when $C = 60$ **(b)** C when $F = 41$.

5 If $A = \pi r^2$, find A when $r = 3.5$.

9 If $s = ut + \dfrac{1}{2}at^2$, find: **(a)** s when $u = 5$, $a = 6$, $t = 2.4$ **(b)** a when $s = 50$, $t = 2.5$, $u = 10$.

13 If $r = \sqrt{\dfrac{A}{\pi}}$, find: **(a)** r when $A = 154$ **(b)** A when $r = 1.75$.

18 If $S = \dfrac{a\left(r^3 - 1\right)}{r - 1}$, find S when $a = 5$, $r = 3$.

22 If $P = \sqrt{\dfrac{2R - V}{5}}$, find: **(a)** P when $R = 50$, $V = 20$ **(b)** V when $P = 0.2$, $R = 20$.