

National 5 Maths Homework ①

- ① a) $2.1538\dots$
 $= 2.15$ (3sf)
 b) $7.11864\dots$
 $= 7.12$ (3sf)
 c) $37.1798\dots$
 $= 37.2$ (3sf)
 d) $2852.91\dots$
 $= 2850$ (3sf)

② $V = l^3$
 $31554.496 = l^3$
 $l = \sqrt[3]{31554.496} = 31.6\text{cm}$

③ $1450\text{L} = 1450,000\text{ml}$
 $V = L \times B \times H$
 $1450000 = 160 \times 110 \times h$
 $1450000 \div 160 \div 110 = h$
 $h = 82.4\text{cm}$ (3sf)

④ $V_{\text{cyl}} = \pi r^2 h$
 $= \pi \times 6.5^2 \times 25$
 $= 3318.307\dots\text{cm}^3$
 $V_{\text{cub}} = 52 \times 34 \times 43$
 $= 76,024\text{cm}^3$
 $V_{\text{cub}} \div V_{\text{cyl}} = 22.91\dots$
 23 times

⑤ a) $c = 9$ b) $10a - 6 = 5$
 $10a = 11$
 $a = \frac{11}{10}$ c) $3d - 6 = 3$
 $3d = 9$
 $d = 3$

d) $12v - 6 = 32$
 $12v = 38$
 $v = \frac{38}{12}$
 $= \frac{19}{6}$ e) $\frac{4a}{5} = 7$
 $4a = 35$
 $a = \frac{35}{4}$ f) $\frac{6f}{7} = 11$
 $6f = 77$
 $f = \frac{77}{6}$

⑥ a) 143.64kg b) 210cm c) $\frac{19}{12}$
 d) $\frac{75}{2}$ e) $24,640$ f) $\frac{13}{2}$