

# National 5 Practice Paper I

## Answers

### Paper 1

1.  $3\frac{1}{2}$

2.  $x < 1$

3.  $(2p + 3)(p - 4)$

4. a)  $S = -4t + 130$  (b) £10

5.  $113.04 \text{ cm}^3$

6.  $x = 7, y = -2$

7. 540ml

8. a)  $\sqrt{3}$  (b)  $\sqrt{3}$

9. 750g

10.  $45^\circ$

11.  $6\sqrt{2}$

12. a)  $\frac{40}{x}$  (b)  $\frac{40}{x+5}$  (c)  $\frac{200}{x(x+5)}$

13. a)  $(-2, -16)$  (b)  $(6, -16)$  (c)  $y = (x - 14)^2 - 16$

## Answers

### Paper 2

1. £1 158 000 000 000
2.  $\begin{pmatrix} 5 \\ -1 \end{pmatrix}$
3.  $-9$
4.  $1022\text{mm}^3$
5.  $G(0, 2, 2)$   $Q(1, 2, 1)$
6.  $y^2$
7. a)  $-\frac{1}{2}$  (b)  $(0, 3)$
8.  $313\text{ inches}^2$
9.  $b^2 - 4ac = -31$  Since  $b^2 - 4ac < 0$  there are no real roots
10.  $126.9^\circ$
11.  $21\text{cm}$
12.  $5$
13.  $8.6\text{m}$
14. No since  $0.522 > 0.5$
15. a)  $3.875\text{m}$  (b)  $3.5\text{m}$