



1.4 – Calculating powers and roots

Student name: _____ **Answers** _____ Score: _____

1. Work out $\sqrt{2\frac{1}{4}}$. $\frac{3}{2}$ [2]

2. Work out. $(0.6)^2$ 0.36 [1]

3. Find $\sqrt[3]{0.001}$. 0.1 [1]

4. Work out. $(0.3)^2$ 0.09 [1]

5. Work out. 0.2^3 0.008 [1]

6. Work out. $(0.03)^2$ 0.0009 [1]

7. Find the value of $(0.1)^2$. 0.01 [1]

8. Work out.

(a) $(-4)^2$ 16 [1]

(b) $(0.3)^2$ 0.09 [1]

9. Work out the exact value of $\sqrt{2\frac{7}{9}}$. $[\pm]\frac{5}{3}$ or $1\frac{2}{3}$ [2]

10. Work out $(0.2)^3$. 0.008 [1]

11. You are given that $\sqrt{7} = 2.65$ and $\sqrt{70} = 8.37$, each correct to 2 decimal places.

Use this information to find the value of

(a) $\sqrt{700}$, 26.5 [1]

(b) $\sqrt{280}$. 16.74 [1]