

# TK Maths Tuition Worksheet 1: Surds Basics — Answer Sheet

#### **SECTION A — Starter Questions**

- 1. (a) 4 (b) 7 (c) 11
- 2. (a)  $2\sqrt{7}$  (b)  $3\sqrt{5}$  (c)  $7\sqrt{2}$
- 3. (a)  $6\sqrt{2}$  (b)  $5\sqrt{2}$  (c)  $3\sqrt{2}$

#### **SECTION B — Medium Level**

- 4. (a)  $6\sqrt{3}$  (b)  $15\sqrt{3}$  (c)  $8\sqrt{2}$
- 5. (a) 3√10 (b) 2
- 6. (a)  $5\sqrt{3}/3$  (b)  $7\sqrt{5}/10$

## SECTION C — Harder Surd Algebra

- 7. (a) -1 (b)  $9 + 4\sqrt{5}$
- 8. (a)  $2\sqrt{3}$  (b)  $13\sqrt{2}$
- 9.  $2 + 2\sqrt{2}$

# **SECTION D** — Worded Surd Problem

10. 3√3 cm

### **SECTION E — Challenge**

- 11. (a)  $2\sqrt{3}$  (b) 1 (c) xy is rational (1), so not a surd.
- 12.  $1 \sqrt{5}$
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