Short Assessment 1 (Version 1)

Time Allowed: 15 minutes **Total Marks: 18**

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1. Simplify the following expressions leaving your answers in surd form.

   (a) $\sqrt{50}$

   (1 marks)

   (b) $6\sqrt{45}$

   (2 marks)

   (c) $10\sqrt{27} - 2\sqrt{12} + \sqrt{75}$

   (3 marks)

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2. Expand the brackets and simplify the following expressions leaving your answers in surd form.

   (a) $\left(3 + \sqrt{2}\right)\left(7 - \sqrt{2}\right)$

   (3 marks)

   (b) $\left(2 - 3\sqrt{5}\right)\left(7 - 2\sqrt{5}\right)$

   (3 marks)

3. Rationalise the denominators.

(a) $\dfrac{2}{\sqrt{7}}$

<div align="right">(1 marks)</div>

(b) $\dfrac{4}{3\sqrt{5}}$

<div align="right">(2 marks)</div>

(c) $\dfrac{3}{5+\sqrt{2}}$

<div align="right">(3 marks)</div>

- End of Test -