13 £960.68

14 50%

15 51

4 Unit test

1 a $\frac{14}{5} \div \frac{10}{7}$ **[1]** $= \frac{14}{5} \times \frac{7}{10}$ **[1]** $= 1\frac{24}{25}$ o.e. **[1]** b $\frac{17}{3} - \frac{23}{8}$ **[1]** $= \frac{136 - 69}{24}$ **[1]** $= 2\frac{19}{24}$ o.e. **[1]**

2 $\frac{33}{4} - \frac{29}{6}$ **[1]** $= \frac{99 - 58}{12}$ **[1]** $= 3\frac{5}{12}$ o.e. **[1]**

3 a £848.75 ÷ 5 × 12 **[1]** = £2037 **[1]** b £3055.50 **[1]**

4 a 1:4.25 **[1]** b 1:4.5 seen **[1]** The first ward has better ratio as each nurse has fewer patients **[1]**

5 1.27 × 540 **[1]** = €685.50 **[1]** Cameron gets €680 **[1]**

6 a 13 : 9 seen **[1]**
$a = 27$ **[1]**
b $b = 32.5$ **[1]** c $J = \frac{13K}{9}$ **[1]**

7 $\frac{9.63 - 2.14}{2.14} \times 100$ **[1]** = 350% **[1]**

8 a 121 660 ÷ 96.25 **[1]** × 100 **[1]** = 126 400 **[1]** b $\frac{104.5}{96.25} \times 100$ **[1]** = 8.6% increase **[1]**

9 Original area = LW **[1]**
New area = 0.6L **[1]** × 1.3W **[1]** = 0.78LW **[1]**
This is a 22% **[1]** decrease **[1]**

Sample student answer

The question has asked them to 'Compare' the costs of the handbags. They must state, using the costs found, which handbag is cheaper/more expensive. For example, 'The handbag is cheaper in Manchester as it costs £52.50, whereas in Paris it costs £54.'