

## Percentages 2 Answers

1)	68.5    www	3	<b>M2</b> for $67.13 \div 0.98$ or <b>M1</b> for 67. 13 is 98%
2)	843.75	3	<b>M2</b> for $\frac{750 \times 5 \times 2.5}{100} + 750$ oe  or <b>M1</b> for $\frac{750 \times 5 \times 2.5}{100}$ oe  or <b>SC2</b> for answer 93.75
3)	120	2	<b>M1</b> for $\frac{750 \times 2 \times 8}{100}$ oe seen or <b>SC1</b> 870 as final answer
4)	<p>(a) 52.2(%) or 52.17...</p> <p>(b) <math>11000 - (32 \div 100 \times 11000)</math> or <math>(68 \div 100 \times 11000)</math> (=) 7480</p> <p>(c) 8293 or 8290 or 8293.2 or 8293.21 as final answer</p> <p>(d) (i) 4 400 (ii) 4 950 (iii) 1 650</p> <p>(e) 8 : 9 : 3 cao</p>	<p><b>1</b></p> <p><b>M1</b></p> <p><b>E1</b> Must see this for the second mark.</p> <p><b>3</b> Either <b>M1</b> for <math>7480 \times 1.035^2</math> oe or <b>M1</b> for <math>7480 \times 1.035 = 7741.8</math> and their <math>7741.8 \times 1.035</math> (<b>M1</b> implied by 8012.76...) Then <b>M1</b> dep for completion of method for the third year If zero <b>SC1</b> for answer 813.(2...)</p> <p><b>1</b></p> <p><b>1</b></p> <p><b>1ft</b> 11 000 – their (d)(i) – their (d)(ii)</p> <p><b>2</b> <b>B1</b> for 40 : 45 : 15 oe seen or correct non-integer ratio</p>	
5)	17.05 cao www	4	<b>M1</b> for $280 \times (1 + \frac{3}{100})^2$ oe  <b>M1</b> subtracting 280 from $280(1 + \frac{k}{100})^2$ any $k$  <b>A1</b> for 17.052 or <b>SC2</b> 297.05 on answer line

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6)	<div>(a) 445 final answer    www 3</div> <div>(b) 640 or 4640 4622.5 or 622.5</div> <div>Alex by 17.5(0)    cao final answer www 6</div>	<div>3    <b>M2</b> for <math>351.55 \div (1 - 0.21)</math> oe or <b>M1</b> for <math>351.55 = (100 - 21) (\%)</math></div> <div>2    <b>M1</b> for <math>4000 \times 0.08 \times 2</math> oe</div> <div>2    <b>M1</b> for <math>4000 \times (1.075)^2</math> oe or <math>4000 \times 0.075 (= 300)</math> <b>and</b> <math>(4000 + \text{their } 300) \times 0.075</math> <b>and</b> total interest = the sum of their 2 interests.</div> <div>2    <b>M1</b> for S I amount – C I amount or reverse or simple interest – compound interest or reverse</div>
7)	<div>(a) 107.52</div> <div>(b) 28.8(0)</div> <div>(c) 14</div>	<div>3    <b>M1</b> <math>2 \times 24 + 3 \times 16</math> or 96 <b>M1</b> for their <math>96 \times 1.12</math> oe</div> <div>2    <b>M1</b> for <math>24 \times 1.2(0)</math> oe</div> <div>3    <b>B1</b> for 42(c) or (\$ 0).42 <b>M1</b> for their <math>\frac{42}{300}</math> oe (<math>\times 100</math>) or <math>\frac{0.42}{3} (\times 100)</math>  alt. method : <b>M1</b> <math>\frac{3.42}{3} (\times 100)</math> or <math>\frac{342}{300} (\times 100)</math> <b>M1</b> their <math>114 - 100</math></div>
8)	543.19	<div>3    <b>M2</b> for <math>500 \times 1.028^3</math> oe or long method or <b>M1</b> for <math>500 \times 1.028^n</math>, <math>n = 2</math> or 4</div>
9)	96	<div>2    <b>M1</b> <math>72 / 0.75</math> oe or <b>M1</b> <math>0.75x = 72</math> oe</div>
10)	88.2(0)	<div>2    <b>M1</b> for <math>84 \times 1.05</math> oe</div>