

**Y4 – Spring – Block 1 – Step 15 – Efficient multiplication Answers**

Question	Answer
1	<p>a) <math>20 \times 4 + 8 \times 4 = 80 + 32 = 112</math> <math>4 \times 28 = 112</math></p> <p>b) Most children will find the first method easier, because it involves two easier multiplications.</p> <p>c) multiple possible answers, e.g. <math>(30 \times 4) - (2 \times 4)</math></p>
2	<p>a) Ron: <math>30 \times 6 = 180</math> <math>5 \times 6 = 30</math> <math>180 + 30 = 210</math> Amir: <math>35 \times 2 = 70</math> <math>70 \times 3 = 210</math> Annie: <math>5 \times 6 = 30</math> <math>30 \times 7 = 210</math></p> <p>b) Amir's and Annie's methods were more efficient than Ron's, as they required only two calculations compared to Ron's three calculations.</p>
3	<p>a) Tiny has subtracted 4 instead of adding it.</p> <p>b) 84</p>
4	<p>a) 252</p> <p>b) 3,564</p>
5	<p>a) 215</p> <p>b) 310</p> <p>c) 370</p> <p>d) 480</p>
6	<p>a) 200</p> <p>b) 200</p> <p>c) Children need to justify the method they prefer.</p>