

Y3 – Spring – Block 1 – Step 3 – Reasoning about multiplication Answers

Question	Answer												
1	a) $4 \times 5 = 20$ $5 \times 4 = 20$ $4 \times 5 = 5 \times 4$ b) $20 \div 4 = 5$ $20 \div 5 = 4$ $20 \div 4 > 20 \div 5$												
2	a) $>$ b) $=$ c) $=$												
3	a) 3 b) 4 c) Jo												
4	a) $=$ b) $=$ c) $>$ d) $<$ e) $>$ f) $=$ g) $<$ h) $>$ Children may have used different strategies for different questions, e.g. noticing that the two numbers in a multiplication are the same but the other way round, noticing that one number in the multiplications is the same so only comparing the other number. Others may have worked out all the calculations and compared the results.												
5	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Less than 6×4</th> <th>Equal to 6×4</th> <th>Greater than 6×4</th> </tr> </thead> <tbody> <tr> <td>$30 \div 6$</td> <td>8×3</td> <td>5×6</td> </tr> <tr> <td>$27 \div 3$</td> <td>4×6</td> <td>4×8</td> </tr> <tr> <td>$18 \div 3$</td> <td>12×2</td> <td></td> </tr> </tbody> </table> <p>children's extra calculations written in each column, e.g. 2×2, 3×8, 6×8 All the divisions are less than 24 so do not need working out. 4×6 is the same as 6×4, so does not need working out. Some children may have used other strategies instead of working out the calculations.</p>	Less than 6×4	Equal to 6×4	Greater than 6×4	$30 \div 6$	8×3	5×6	$27 \div 3$	4×6	4×8	$18 \div 3$	12×2	
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6	a) multiple possible answers, e.g. $7 \times 3 > 5 \times 3$ (any value less than 7) b) $24 \div 8 < 2 \times 2$ or $24 \div 12 < 2 \times 2$ c) $30 \div 6 = 1 \times 5$ d) multiple possible answers, e.g. $12 \times 2 > 12 \div 2$												