## Reasoning and Problem Solving Multiply 4-Digits by 2-Digits

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### **Developing**

1a. 2,211 x 23 = 50,853

2a. An explanation that recognises Jake has not correctly multiplied the thousands in the first number by the tens in the second number.

3a. Various answers, for example: 2,311 x 23 = 53,153 and 2,322 x 23 = 53,406

## **Expected**

4a.  $7,931 \times 21 = 166,551$ 

5a. An explanation that recognises Tom has not included a place holder when multiplying his tens.

6a. Various answers, for example: 1,682 x 13 = 21,866 and 1,673 x 13 = 21,749

## **Greater Depth**

 $7a. 6,425 \times 37 = 237,725$ 

8a. An explanation that recognises Philip has not added on the 2 hundreds which were carried over from the multiplication of the 4 tens and the 6 ones.

9a. Various answers, for example: 4,735 x 14 = 66,290 and 4,726 x 14 = 66,164

#### **Developing**

1b.  $2,140 \times 21 = 44,940$ 

2b. An explanation that recognises that Tina has not correctly multiplied the tens in both numbers.

3b. Various answers, for example: 3,221 x 21 = 67,641 and 3,321 x 21 = 69,741

## **Expected**

4b.  $2,317 \times 12 = 27,804$ 

5b. An explanation that recognises Julie has not added the thousand carried over from the 3 x 6 hundreds.

6b. Various answers, for example: 2,512 x 14 = 35,168 and 2,612 x 14 = 36,568

#### **Greater Depth**

7b. 9,284 x 27 = 250,668

8b. Amy is correct. Multiplications have been done correctly, ensuring correct values have been carried.

9b. Various answers, for example: 3,494 x 26 = 90,844 and 3,476 x 26 = 90,376

