Practicing Number Sense

6	+	4	=	10	**SUM**
6	-	4	=	2	**DIFFERENCE**
6	×	4	=	24	**PRODUCT**
6	/	4	=	1.50	**QUOTIENT**

4 5 **6** 7 8   **Green Number**

2 3 **4** 5 6   **Blue Number**

For these, use the Number Rings app: www.mathfour.com/number-rings-app (iPhone/ iPad only). Use theses answers to help you guide students in their discovery.

1. Start with both the green and the blue rings on 1. Spin the green ring to any number. What do you notice?

   - The PRODUCT and the QUOTIENT are the same.
   - If you add the SUM and the DIFFERENCE together, it's exactly double your green number.
   - The SUM, DIFFERENCE, PRODUCT and QUOTIENT are all really close to each other.
   - The QUOTIENT is a whole number.

2. Spin both rings until the DIFFERENCE is equal to zero. What do you notice?

   - The green number is the same as the blue number.
   - The SUM is exactly double the blue number.
   - The PRODUCT is much bigger than either green or blue number.
   - The QUOTIENT is 1.

3. Spin both rings until the QUOTIENT is 1. Then move the green number. What do you notice?
   - As the green number gets larger than the blue number, the QUOTIENT is greater than one.
   - As the green number gets smaller than the blue number, the QUOTIENT is less than one.
   - As the green number gets larger than the blue number,The DIFFERENCE is positive, or greater than zero.
   - As the green number gets smaller than the blue number, the DIFFERENCE is negative, or less than zero.

Practicing Number Sense

www.MathFour.com/number-rings

4. Spin both rings until the QUOTIENT is 1. This time move the *blue* number. What do you notice?

- As the blue number gets larger than the green number, the QUOTIENT is less than one.
- As the blue number gets smaller than the green number, the QUOTIENT is greater than one.
- As the blue number gets larger than the green number,The DIFFERENCE is negative, or less than zero.
- As the blue number gets smaller than the green number, the DIFFERENCE is positive, or greater than zero.

5. Spin both rings to the number 5. Increase the green number a few at a time. How do the SUM and DIFFERENCE compare?

- The last digit of the SUM and the last digit of the DIFFERENCE are the same.

6. Spin both rings and investigate: where are there negative numbers?

- In the DIFFERENCE only.

7. What's the biggest number you can get for each of the SUM, DIFFERENCE, PRODUCT and QUOTIENT? What are each of the rings set on for these?

	Biggest	**Green Number**	**Blue Number**
SUM	198	99	99
DIFFERENCE	98	99	1
PRODUCT	9801	99	99
QUOTIENT	99	99	1

	Smallest	**Green Number**	**Blue Number**
SUM	2	1	1
DIFFERENCE	-98	1	99
PRODUCT	1	1	1
QUOTIENT	0.01	1	67 through 99