

3. Generate and solve another division problem with the same quotient and remainder as the two problems below. Explain your strategy for creating the new problem.

$$\begin{array}{r} 3 \\ 18 \overline{) 66} \\ \underline{- 54} \\ 12 \end{array}$$

$$\begin{array}{r} 3 \\ 65 \overline{) 207} \\ \underline{- 195} \\ 12 \end{array}$$

To check division, I can multiply the answer and the divisor, then add the remainder. So I multiplied  $3 \times$  my number which was 27 and got 81. Then I added 12. So my dividend must be 93.

$$\begin{array}{r} 3 \\ 27 \overline{) 93} \\ \underline{- 81} \\ 12 \end{array}$$

$$\begin{array}{r} 3 \\ 16 \overline{) 54} \\ \underline{- 48} \\ 6 \end{array}$$

$$\begin{array}{r} 16 \\ \times 3 \\ \hline 48 \\ + 12 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \\ + 12 \\ \hline 93 \end{array}$$

4. Sarah says that  $19 \div 9$  equals  $9 \div 4$  because both are "2 R1." Show her mistake using decimal division.

$$\begin{array}{r} 2.1\bar{1} \\ 9 \overline{) 19.00} \\ \underline{- 18} \\ 10 \\ \underline{- 9} \\ 10 \\ \underline{- 9} \\ 1 \end{array}$$

$$\begin{array}{r} 2.25 \\ 4 \overline{) 9.00} \\ \underline{- 8} \\ 10 \\ \underline{- 8} \\ 20 \\ \underline{- 20} \\ 0 \end{array}$$

$$19 \div 9 = 2.1\bar{1}$$

$$9 \div 4 = 2.25$$