## EXTRA PRACTICE - Exercises

## Unit I - The Structure of Mathematics

Part C - Further Investigation of Operation Symbols Lesson 3 - Properties of Operations with Special Numbers

State which special property concerning 0 or 1 is used to justify each step indicated in the following problems.

1. $\quad\left\{\left(\frac{1}{7} \cdot 7\right)+[5 \cdot(4-4)+7]\right\} \cdot \frac{1}{8}=1$
a. $\quad\{1+[5 \cdot(4-4)+7]\} \cdot \frac{1}{8}=1$
b. $\quad \begin{cases}1 & \left.+\left[\begin{array}{lll}5 \cdot & 0 & +7\end{array}\right]\right\} \cdot \frac{1}{8}=1\end{cases}$
c. $\quad\left\{1+\left[\begin{array}{ll} & 0 \\ \hline\end{array}\right]\right\} \cdot \frac{1}{8}=1$
d. $\{1+7 \quad\} \cdot \frac{1}{8}=1$
$8 \quad \cdot \frac{1}{8}=1$
2. $\quad\left\{6 \cdot 1+\left[(9-9)+4 \div\left(\frac{2}{3} \cdot \frac{3}{2}\right)\right]\right\}=10$.
a. $\left\{6+\left[(9-9)+4 \div\left(\frac{2}{3} \cdot \frac{3}{2}\right)\right]\right\}=10$
b. $\left\{6+\left[0+4 \div\left(\frac{2}{3} \cdot \frac{3}{2}\right)\right]\right\}=10$
c. $\left\{6+\left[\begin{array}{llll}0 & +4 \div & 1\end{array}\right]\right\}=10$
d. $\left\{6+\left[\begin{array}{ll}0 & +4\end{array}\right]\right\}=10$
e. $\{6+4\}=10$
$10=10$

# Unit I - The Structure of Mathematics Part C - Further Investigation of Operation Symbols Lesson 3 - Properties of Operations with Special Numbers 

State which special property concerning 0 or 1 is used to justify each step indicated in the following problems.

1. a. Multiplicative Inverse Property
b. Additive Inverse Property
c. Multiplication Property of Zero
d. Identity Property of Addition
2. a. Identity Property of Multiplication
b. Additive Inverse Property
c. Multiplicative Inverse Property
d. Identity Property of Division
e. Identity Property of Addition
