## Illustrative Mathematics

## 4.NF How Many Tenths and Hundredths?

Alignment 1:4.NF.C.5, 4.NF.C. 6
Not yet tagged
a. Finish the equations to make true statements. Write one number in each space.
i. 1 tenth +4 hundredths = $\qquad$ hundredths
ii. 4 hundredth +1 tenths = $\qquad$ hundredths
iii. 5 tenths +2 hundredths $=$ $\qquad$ hundredths
iv. 5 hundredths +2 tenths = $\qquad$ hundredths
v. 14 hundredths = $\qquad$ hundredths + 4 hundredths
vi. 14 hundredths = $\qquad$ tenths +4 hundredths
vii. 14 hundredths $=1$ tenths +3 hundredths + $\qquad$ hundreths viii. 80 hundredths = $\qquad$ tenths

## Commentary

Parts (a) and (b) have the same solution, which emphasizes that the order in which we add doesn't matter (because addition is commutative), while parts (c) and (d) emphasize that the position of a digit in a decimal number is critical. The student must really think to encode the quantity in positional notation.

In parts (e), (f), and (g), the base-ten units in 14 hundredths are bundled in different ways. In part (e), "hundredths" are thought of as units: 14 things $=10$ things +4 things.

Part (h) addresses the notion of equivalence between hundredths and tenths.

Solution: Answers
a. 14
b. 14
c. 52
d. 25
e. 10
f. 1
g. 1
h. 8

