## **More Base-Ten Shorthand**

Check-In: Questions 1–2

**1.** Joe showed several ways of writing 32 Chocos by using base-ten shorthand. Some of Joe's work was smudged. Write what is missing in the smudged gray area. You may use base-ten pieces to help find the answers. Use base-ten shorthand to sketch your answer. The first one is an example.

**Ex.** Write what is missing in the gray area to show 32 with base-ten shorthand. Write a number sentence to match the pieces.



Here is what Joe thinks. "There are 12 bits showing. That means 20 is missing, because 32 - 12 = 20. I write 20 using base-ten shorthand in the gray area. Now it shows 32." Here is what Joe writes.



$$20 + 12 = 32$$

**A.** Here is another way to show 32. Fill in the gray area and write a number sentence to match the pieces.



**B.** Here is a third way to show 32. Fill in the gray area and write a number sentence to match the pieces.

