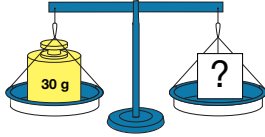Name _____ Date _____

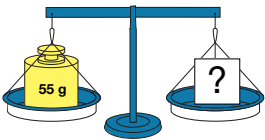### Balanced and Equal

Use a Two-Pan Balance

Use a two-pan balance and a set of standard masses. Place the number of grams listed in one pan. Use different gram masses in the other pan to balance the scales. Write number sentences to show two different ways to balance the pans.

Example: 30 grams

One way $\underline{10 + 10 + 10 = 30}$ g
Another way $\underline{5 + 10 + 5 + 10 = 30}$ g

1. 55 grams

One way _____

Another way _____

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Balanced and Equal (SAB pp. 395–400)
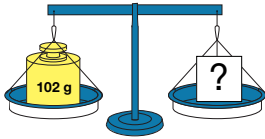### Questions 1–8

Answers will vary. Possible answers given for Questions 1–3.

1. $10 + 10 + 10 + 20 = 5 = 55$
$20 + 5 + 20 + 10 = 55$

2. $50 + 50 + 1 + 1 = 102$
$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 1 + 1 = 102$

3. $50 + 50 + 20 + 1 + 1 + 1 = 123$
$100 + 10 + 10 + 1 + 1 + 1 = 123$

4. Students should circle the masses in Questions 4A and 4C to show that these combinations will balance.
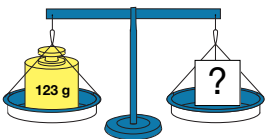

Name _____ Date _____

2. 102 grams

One way _____

Another way _____

3. 123 grams

One way _____

Another way _____

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Name _____ Date _____

Add Mass

4. Circle the two-pan balances that will balance.

A.

B.

C.
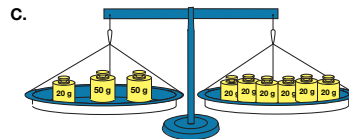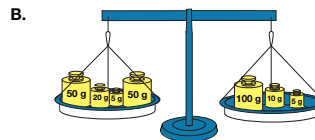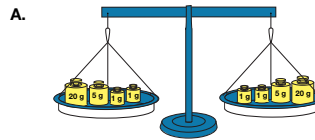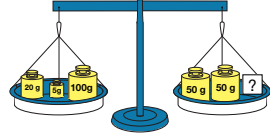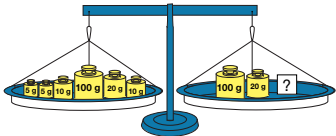
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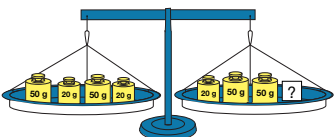
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5. A. 25

  B. 30

  C. 20

6. A. No

  B. Possible response: She could add 20 grams to pan B; $5 + 50 + 50 + 5 + 20 = 130$

7. A. 85 g

  B. Possible response: Yes, because both sides of the equal sign amount to 85 grams. I can add the numbers in any order.

8. A. $100 + 50 + 50 + 50 + 50 = 300$

  B. $50 + 50 + 50 + 50 + 100 = 300$

  C. Possible response: Yes, I got the same answer because I can group and add the numbers in any way that makes sense to me.

  $100 + 50 + 50 + 50 + 50 = 50 + 50 + 50 + 50 + 100$

  D. Possible response: Sam is not correct. You can group and add numbers in any order in an addition number sentence and you will get the same sum.

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