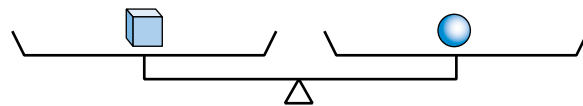
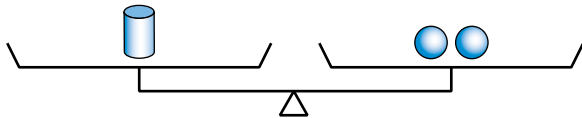


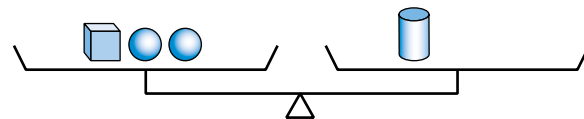
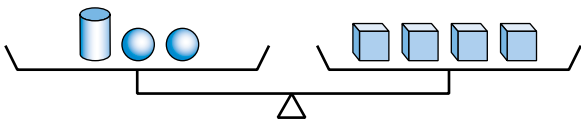
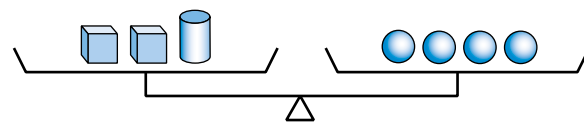
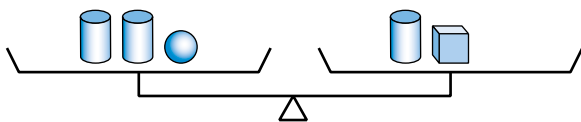
A Balancing Act with Pan Balances

Math Message

- 1 These two pan balances are each in perfect balance.

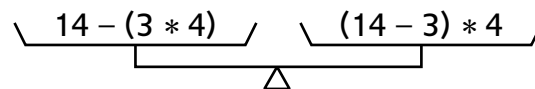
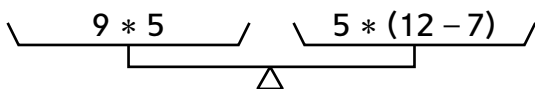
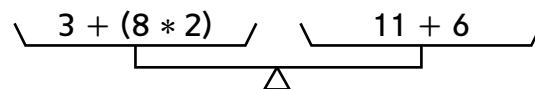
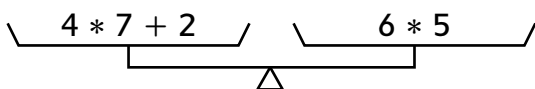


- a. Use the relationships in the pan balances shown above to determine which of the pan balances below are balanced. Circle the ones that are in balance.



- b. For any pan balance above that you did not circle, add or cross out objects to balance the pans.

- 2 a. Circle each pan balance that is balanced with equivalent expressions.



- b. For any pan balance above that you did not circle, cross out one of the expressions and write a new one above it that will balance the pans.

A Balancing Act with Pan Balances (continued)

Lesson 6-5

DATE

TIME

- 3 Balance each pan balance. Record equivalent expressions in each pair of pans. Use expressions from the list below.

You will not use all of the expressions.

$$7 * 5 + 10$$

$$100 - 1$$

$$\frac{1}{2} * (22 * 9)$$

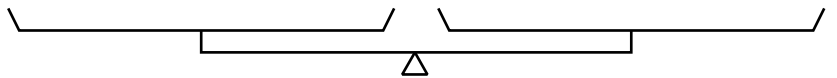
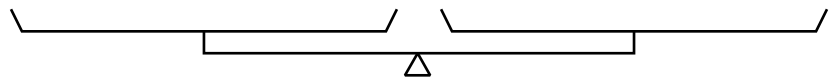
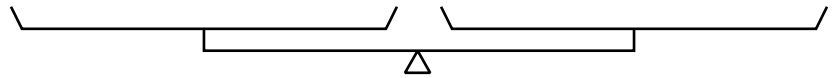
$$9 * 5$$

$$22.5 * 2$$

$$2^4 - (7.5 * 2)$$

$$100 \div (25 * 4)$$

$$90 \div 2$$



- 4 Find the value of the missing number that will balance each set of pans below. The same number is missing from both sides of a pan balance.

a. $\frac{\square + 3}{\quad} = \frac{2 * \square}{\quad}$

$$\square = \underline{\hspace{2cm}}$$

b. $\frac{2 * \square + 7}{\quad} = \frac{\square + 17}{\quad}$

$$\square = \underline{\hspace{2cm}}$$

c. $\frac{\square * 20}{\quad} = \frac{80 \div \square}{\quad}$

$$\square = \underline{\hspace{2cm}}$$

d. $\frac{63 - \square}{\quad} = \frac{2 * \square + 3}{\quad}$

$$\square = \underline{\hspace{2cm}}$$