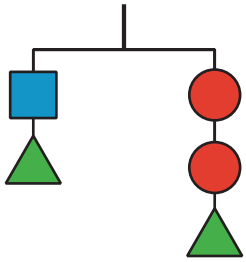
Lesson 5 Practice Problems

1 Which of the changes keeps the hanger in balance?

Select **all** that apply.



A. Adding two circles on the left and a square on the right

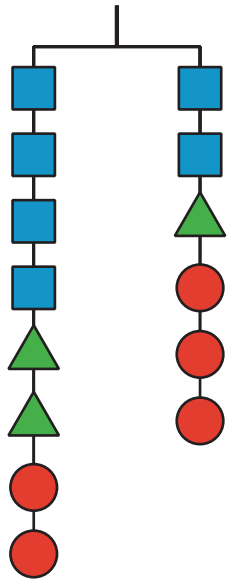
B. Adding two triangles to each side

C. Adding two circles on the right and a square on the left

D. Adding a circle on the left and a square on the right

E. Adding a triangle on the left and a square on the right

2 Here is a balanced hanger diagram.



Each triangle weighs 2.5 pounds, each circle weighs 3 pounds, and x represents the weight of each square. Select **all** equations that represent a balanced hanger.

A. $x + x + x + x + 11 = x + 11.5$

B. $2x = 0.5$

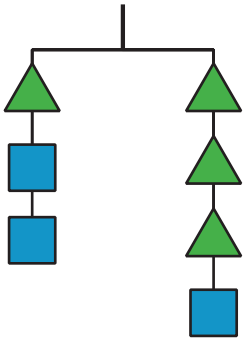
C. $4x + 5 + 6 = 2x + 2.5 + 6$

D. $2x + 2.5 = 3$

E. $4x + 2.5 + 2.5 + 3 + 3 = 2x + 2.5 + 3 + 3 + 3$

3 What is the weight of a square if a triangle weighs 4 grams?

Explain your reasoning.



4 from Unit 4, Lesson 4

In each row, decide whether the expression in column A is equivalent to the expression in column B. If they are not equivalent, show how to change one expression to make them equivalent.

A	B
a. $3x - 2x + 0.5x$	a. $1.5x$
b. $3(x + 4) - 2(x + 4)$	b. $x + 3$
c. $6(x + 4) - 2(x + 5)$	c. $2(2x + 7)$
d. $3(x + 4) - 2(x + 4) + 0.5(x + 4)$	d. 1.5
e. $20\left(\frac{2}{5}x + \frac{3}{4}y - \frac{1}{2}\right)$	e. $\frac{1}{2}(16x + 30y - 20)$

5 from Unit 3, Lesson 13

A sign on the road says, "Speed limit: 60 miles per hour."

a. Let s be the speed of a car. Write an inequality that matches the information on the sign.

b. Draw a number line to represent the solutions to the inequality.

c. Could 60 be a value of s? Explain your reasoning.