

Name _____

2-3A Lesson Master**Questions on SPUR Objectives**

See Student Edition pages 143–147 for objectives.

PROPERTIES Objective D

- Suppose y varies directly as x . What is the effect on y if x is
 - doubled? _____
 - divided by 5? _____
 - tripled? _____
 - increased by 12%? _____
- Suppose d varies inversely as the square of t . What is the effect on d if t is
 - doubled? _____
 - divided by 4? _____
 - halved? _____
 - multiplied by a ? _____
- Suppose p is directly proportional to the fourth power of r . What is the effect on p if r is
 - quadrupled? _____
 - divided by 10? _____
 - divided by c ? _____
 - multiplied by b ? _____
- Suppose y is inversely proportional to the n th power of x . What is the effect on y if x is
 - doubled? _____
 - divided by 3? _____
 - divided by c ? _____
 - multiplied by d ? _____

In 5–7, suppose the weight of an animal varies directly as the cube of its height or length.

- A baby snake is $\frac{1}{6}$ as long as an adult. How do their weights compare?

- A male lion is 1.15 times as tall as a female lion. How do their weights compare?

- A songbird is one third as tall as a hawk. How do their weights compare?

Fill in the Blanks In 8–10, suppose the radius of a sphere is tripled. Find the change in the characteristic.

- The volume of the sphere is _____.
- The diameter of the sphere is _____.
- The surface area of the sphere is _____.