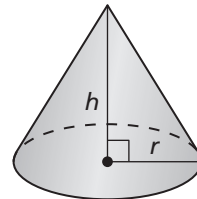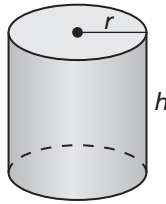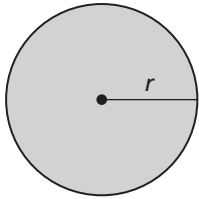Name _____ Date _____

7.3 Enrichment and Extension

Area and Volume

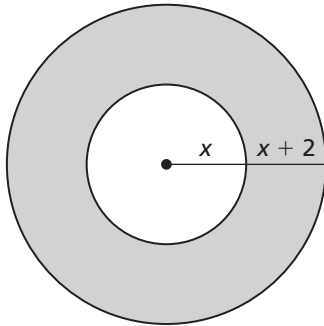Area of Circle: $A = \pi r^2$ Volume of a Cylinder: $V = \pi r^2 h$ Volume of a Cone: $V = \frac{1}{3}\pi r^2 h$
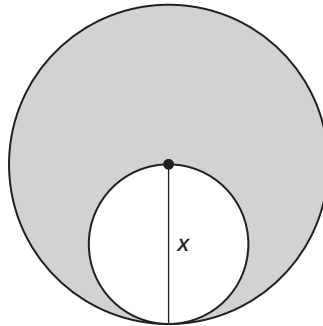

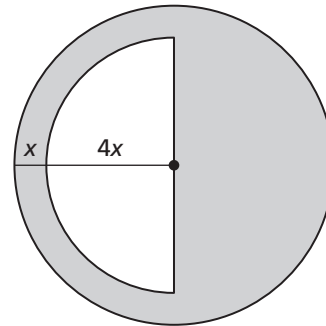**In Exercises 1–3, write an algebraic expression for the shaded area.**
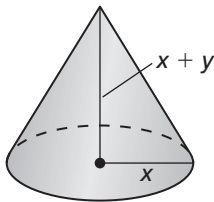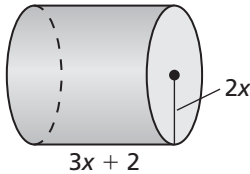
1.

x $x + 2$

2.

x

3.

x $4x$

In Exercises 4–6, write an algebraic expression for the volume of the figure.

4.
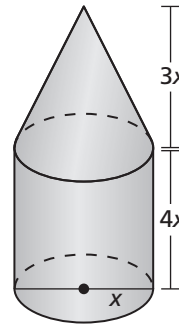

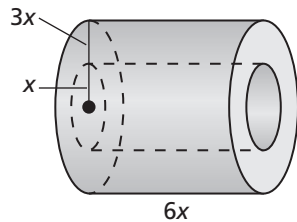$x + y$

x

5.

$2x$

$3x + 2$

6.

$3x$

$4x$

x

In Exercises 7 and 8, write an algebraic expression for the volume of the figure with a hole in it.

7.

$3x$

x

$6x$

8.

$3x$ $5x$

$2x$ $2x$