

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Flow Rate Worksheet

Solve for the given variable.

1.  $V = 17.23\pi(31.573)$

2.  $556.73 = 804.25v$

3. The diameter of a well head is 12 ft. The oil has a flow rate of 50 g/m..  
What is the velocity of the oil?

4. A garden hose has a diameter of  $\frac{3}{4}$  inch and a velocity of 22.63 inches per minute.  
What is the flow rate of the water in the hose in gallons?

5. Water flows through a sewer at a rate of 5 meters per minute with a velocity of .3 m/m.  
What is the diameter of the sewer?

6. Firemen release the cap of a fire hydrant that is 7 lbs and has an inner circumference of 6.7 inches, in order to allow 7 gallons of water to flow out. After 1 minute the water is 2.75 feet from the base of the fire hydrant. After 4 hours, they replace the cap and shut of the water; the resulting puddle contains 11 gallons of water. What was the flow rate of the water?