**Flow Rate Worksheet Answers**

Solve for the given variable.

1. 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?

The diameter is 12 feet, therefore it has a radius of 6 feet.

meters per minute

1. A garden hose has a diameter of ¾ inch and a velocity of 22.63 inches per minute.   
   What is the flow rate of the water in the hose in gallons?

Diameter is ¾ of an inch; therefore it has a radius of .375 inches.

gallons per minute

1. 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?

meters

1. 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?

D=rt (this is the same as velocity) thus

feet per minute

Circumference is 6.7, since , the radius is 10.5