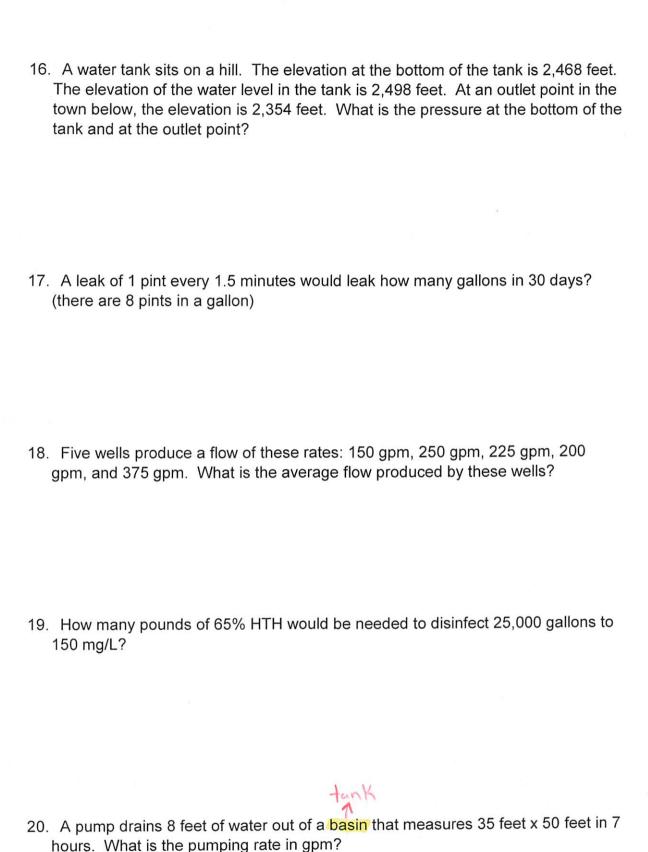
BASIC MATH PRACTICE PROBLEMS

1.	How many feet of head would create a pressure of 90 psi?
2.	A pump runs 24 hours and pumps 120,000 gallons. What is the pumping rate in gallons per minute?
3.	How much does 500 gallons of water weigh?
4.	Garrison Dam releases water at a rate of 40,000 cubic feet per second. How many gallons in a day are released from the dam?
5.	What is the detention time (in minutes) for a tank with a diameter of 30 feet and a depth of 20 feet with a flow of 2 MGD?

6.	A city spends \$80,000 in a year and sells 400 million gallons of water. What is the cost per 1,000 gallons?
7.	How many gallons of water can a tank with a radius of 30 feet and a depth of 20 feet hold?
8.	How many gallons of water are in a 24 inch pipe that is 2 miles long?
9.	A tank holds 100,000 gallons. How long will it take to empty the tank if it is releasing 200 gpm?
10	. A rectangular tank measures 10 feet x 18 feet x 20 feet. How many gallons can the tank hold?

11. How ma	any 25 foot long	sections of	ductile iron pip	e will be need	ed for 250 feet

	any hours would filling rate of 1,0		a 50 foot diar	neter tank with	a height of 30
13. How ma 50 mg/L?	any pounds of 6	5% HTH wou	uld be needed	to dose 5,000	,000 gallons at
	any pounds of 6 pipe to 50 mg/L		uld be needed	to dose a leng	gth of 2,000 feet
the plant i	treatment plant is 3 mg/L. If ch on chlorine per	lorine costs 2			



21. A reading is taken at a meter and measures 24,375,112 gallons. Thirty days later the meter reads 24,379,636 gallons. What has been the usage during those thirty days and what has the flow been in gpm?
22. How many cubic yards of material will need to be removed to excavate a trench measuring 1.25 mile long, 4 feet wide, and 6 feet deep?
23. A pipe has a diameter of 48 inches and is full of water. If the velocity through the pipe is 20 feet per minute, what is the flow rate through the pipe in gallons per minute?
24. An 8 inch pipe carries water through it at a flow rate of 60 gpm. What is the velocity of the water in the pipe?
25. A pump runs for 36 hours and delivers 350,000 gallons. What is the flow rate in gpm?

26	How many gallons will a 40 foot tall tank with a circumference of 283 feet hold when it is full?
27.	What is the per capita production in gallons per day for a system that produces 3,000 gpm for a population of 22,000?
28.	If a chlorine residual is 1.8 mg/L at the chlorinator and 0.3 mg/L in the distribution system, what is the chlorine demand?
29.	What is the drawdown in a well with a static water level of 143 feet and a pumping water level of 169 feet?
30.	What is the velocity of the water (in feet per second) of an 8 inch pipe with a flow of 520 gpm?

