

Name_____

Period_____

Calculating Kilowatt-hours of Common Appliances

Unit rate: 1 kilowatt-hour = 1,000 watts

Appliance	Watts	Calculations (Show work)	kWh
Microwave oven	1,500 W		
Cable box	140 W		
Clothes dryer	2790 W		
Clothes washer	255 W		
Refrigerator	225 W		
Wi-fi Router	6 W		
LCD Television	150 W		
X-Box game console	36 W		
Water Heater	4500 W		
Laptop computer	25 W		

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Calculating Unit Rate Worksheet

Directions: Use the sample utility bill to calculate the unit rate charged for the energy charge, fuel cost charge, and the demand charge.

Sample Energy Bill

METER READING INFORMATION			
METER#	Read Dates: 03/24/14 - 04/22/14 (29 Days)		
DESCRIPTION	CURRENT READING	PREVIOUS READING	USAGE
Total Energy	63084 Actual	61299 Actual	1785 kWh
Demand	Actual		5.97 kW
Billable Demand			6 kW

ELECTRICITY CHARGES		RATE: General Service	
DESCRIPTION	USAGE UNITS	RATE	CHARGE
Basic Service Chg			\$25.70
Energy Charge	1785 kWh		\$53.21
Fuel Cost Charge	1785 kWh		\$54.94
Demand Charge Winter	6 kW		\$53.88
Affordability Chrg			\$2.68
Resource Adjustment			\$8.08
Interim Rate Adj			\$8.78
Subtotal			\$207.27
Transit Improvement Tax		0.25%	\$0.53
State Tax		6.875%	\$14.25
Total			\$222.05

1. A customer used 1785 kWh and was charged \$53.21 for energy. What is the unit rate per kWh the customer was charged for energy?
2. A customer used 1785 kWh and was charged \$54.94 for fuel cost. What is the unit rate per kWh the customer was charged for fuel cost?
3. A customer used 6 kW and was charged \$53.88 for a winter demand charge. What is the unit rate per kW the customer was charged for the winter demand charge?