Worksheet 1-3: Unit Rates- Comparisons

1. Find the unit rate for each situation.

a) driving 180 km in 3 hours

b) 54 hot dogs for 18 people

c) 160 words typed in 4 minutes

d) $27.40 for 4 hours of work

e) $12.66 for 8 packages of juice boxes

f) $284 for a 4 day car rental

g) 560 heartbeats in 6.5 minutes

h) jogging 3.5 km in 30 minutes

i) a convenience store has 15 customers in 20 minutes

j) the temperature changes by -16ºC in 4 hours

2. A student worked 5 days/week and 8 h/day. He earned $300/week. What was his hourly rate of pay?

3. The gas consumption in vehicles is reported in litres per 100 km (L/100km).

a) Car A has an average consumption of 17.2 L/100 km. Car B has an average consumption of 15.2 L/100 km. Which car is more energy efficient?

b) Complete this table. Round each answer to the nearest tenth of a litre per 100 km.

Car	Distance Driven (km)	Gas Used (L)	Gas Consumption (L/100km)
X	750	48	
Y	1240	92	
Z	565	27.5	

c) Which car was most efficient? Which was least efficient?

4. A television ad claims that 4 L of paint will cover 40 m^2. How much paint is needed to cover 70 m^2?

5. Each of your finger nails grows at about 0.05 cm/week. Each of your toenails grows at about 0.65 cm/year. Do your toenails or finger nails grow faster?

6. Decide which is the better value based on the unit prices.

a) $25.00 for concert tickets for 2 people or $36.00 for concert tickets for 3 people.

b) $380 for a bus for 32 people or $420 for a bus for 38 people.

c) $4.25 for 4 L of milk or $2.55 for 2 L of milk.

d) 35 g of mixed nuts for $0.99 or 50 g of mixed nuts for $1.49.

e) inline skate rentals at $30.00 for 4 hours or $54.00 for 7 hours.

f) 1 L of pop for $0.90 or a case of 24 cans of 355 mL of pop for $4.25.

g) 500 sheets of paper for $9.45 or 4500 sheets of paper for $49.00.

h) 25 L of gas for $21.50 or 35 L of gas for $40.00.