

The Math Dawg Exercises to Accompany “Basic Unit Rates”_1

DIRECTIONS: Calculator allowed

1. One brand of apple juice has 24 oz. and sells for \$3.25. Another brand of apple juice has 32 oz. and sells for \$4.48. Which brand costs less per ounce (oz)?

2. A test is performed on 2 brands of semi- trucks. The first truck goes 900 miles and uses 161 gallons of fuel. The second truck goes 1150 miles and uses 202 gallons of fuel. Which truck gets the better gas mileage (miles per gallon ($\frac{mi}{gal}$))?

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3. Turpentine has a density of $0.85 \frac{g}{cm^3}$. An object that has a mass of 1150 g. and a volume 1390 cm^3 is placed in a solution of turpentine. Will the object float or sink? Recall that if the density of the object is greater than that of the turpentine it will sink and if the density of the object is less than that of turpentine it will float.