Direct Variation

Solve using proportions.

1) If 7 cans of dog food sell for $4.13, how much will 10 cans of dog food sell for?

2) If 6 cans of coffee sell for $22.24, how much will 20 cans sell for?

3) A mechanic took 7 hrs to tune up 9 fuel-injected engines. At this rate, how many fuel-injected engines can be tuned up in 37.5 hrs? Round to the nearest whole number

4) A costume maker took 9 hrs to make 4 headpieces for a Mardi Gras ball. At this rate, how many complete headpieces can be made in 35 hrs?

5) How far can a family travel in 5 days if it travels at the rate of 855 mi in 3 days?

6) How far can a tractor-rig travel in 8 days if it travels at the rate of 1680 mi in 4 days?

7) How much insecticide does 275 acres of farmland need if the insecticide treats 50 acres per 100 lb?

8) How much fertilizer does 2625 ft^2 of lawn need if the fertilizer treats 1575 ft^2 per gallon? Express the answer to the nearest tenth of a gallon.

9) Two gears have a ratio of 8 to 2. If the larger gear has 48 teeth, how many does the smaller gear have?

10) Two gears have a ratio of 9 to 4. If the larger gear has 72 teeth, how many does the smaller gear have?