

Unit 5: Multiplicative Comparison and Measurement

ADVANCED • SET 2

Name: _____ Date: _____

Solve each problem. Show your work on scratch paper and write the exact final answer (a number with its unit where asked).

1. A blue whale is 27 times as long as a dolphin. The dolphin is 340 cm long. How many meters long is the blue whale? (100 cm = 1 m)

Answer: _____

3. A tank holds 18 liters of water. A second tank holds 6 times as much as the first, and a third tank holds 250 milliliters less than the second. How many milliliters does the third tank hold? (1 L = 1000 mL)

Answer: _____

5. A crate of books weighs 8 kg 400 g. A crate of magazines weighs 3 times as much minus 1 kg 200 g. What is the total weight of both crates, in grams? (1 kg = 1000 g)

Answer: _____

7. One truck carried 6 loads of 425 kg each. A second truck carried 8 times as much as one single load. How many kilograms did the two trucks carry in total?

Answer: _____

9. A ribbon is 4 m long. Piece A is 3 times as long as piece B, and together A and B use the whole 4 m ribbon with 20 cm left over. How many centimeters long is piece B?

Answer: _____

2. Maya has 4 pieces of ribbon, each 2 m 75 cm long. She uses them to wrap boxes, and each box needs 45 cm of ribbon. How many whole boxes can she wrap?

Answer: _____

4. A relay team of 4 runners each ran the same distance. Together they ran 3 km 600 m. The distance one runner ran is how many times the length of a 45-meter swimming pool? Give the number of pool-lengths.

Answer: _____

6. A film runs for 2 hours 15 minutes. A documentary is 5 times as long as a short cartoon, and the cartoon is 24 minutes long. How many minutes longer is the documentary than the film?

Answer: _____

8. A garden hose fills a bucket in 90 seconds. A larger hose is 6 times as fast (fills the same bucket in $\frac{1}{6}$ the time). A hose that is 3 times as slow as the garden hose fills the bucket in how many seconds?

Answer: _____

10. A store sold 1,250 grams of nuts on Monday. On Tuesday it sold 4 times as much, and on Wednesday it sold half of Tuesday's amount. What was the total weight sold over the three days, in kilograms? (1 kg = 1000 g)

Answer: _____