Name
Date
Arithmetic

Arithmetic Test II (actual test)

Instructions

I) Write a title, name, date, and course.
II) Number each problem, circle the number, rewrite the problem, and show all work.
III) Put a rectangle around your answers.
IV) Write any fractions in your answers in lowest terms and never leave your answers as improper fractions.

① Find the GCF of 64 and 40.

② Find the LCM of 15 and 12.

③ What is a composite number?

④ Find the prime factorization of 50. Write the factors from least to greatest and with repeating factors in power notation (e.g. $3^4 \cdot 5 \cdot 7$).

⑤ Reduce the following fractions to lowest terms: $\frac{100}{500}$, $\frac{20}{35}$, $\frac{54}{99}$.

⑥ If Larry drinks $\frac{2}{3}$ of a bottle of water every hour, what fraction of a bottle will he drink in $\frac{3}{4}$ of an hour?

⑦ What is the product of $5\frac{3}{7}$ and $1\frac{4}{5}$?

⑧ If an office building uses $4\frac{1}{5}$ joules of energy per second, and the building used $1\frac{5}{7}$ joules of energy, for how many seconds was the energy flowing?

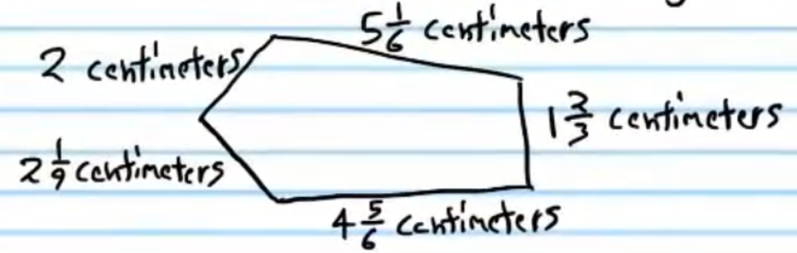
⑨ Find the sum of $\frac{4}{5}$ and $\frac{9}{10}$.

⑩ Bobby makes $2\frac{3}{8}$ million dollars every year and Kevin makes $3\frac{1}{5}$ million dollars every year. What is the difference between their yearly incomes?

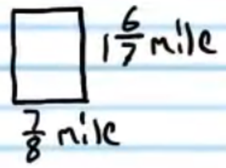
⑪ If Joe Bob is $6\frac{3}{5}$ feet tall and Jimmy is $5\frac{1}{4}$ feet tall, how much taller is Joe Bob than Jimmy?

⑫ A snake slithers at $\frac{5}{7}$ of a mile per hour. If the snake slithered at this speed for $\frac{2}{5}$ of a mile, for what fraction of an hour was the snake slithering?

⑬ Find the perimeter of the figure below.



⑭ What is the area of the rectangular lot of land below?



⑮ An airplane flies $3\frac{1}{2}$ kilometers per minute. How far will the plane fly in $10\frac{3}{4}$ minutes?

⑯ Divide 8 by $\frac{4}{5}$.

Perform the following operations.

(17) $\frac{8}{9} \div 4$ (18) $3\frac{2}{3} \div \frac{4}{5}$ (19) $9 - 2\frac{5}{11}$ (20) $\frac{5}{6} \times 9$

(21) A bat eats $5\frac{5}{8}$ grams of insects per hour. At this rate, how much time will pass if a bat eats $15/16$ of a gram of insects?

(22) Find the difference between $\frac{7}{8}$ and $\frac{1}{10}$.

(23) Underline the composite numbers in the list below.

8, 17, 7, 10, 45, 100

(24) Bo has $\frac{1}{10}$ of a pound of jerky, $\frac{2}{5}$ of a pound of trail mix, $\frac{3}{20}$ of a pound of dried ice cream, and $\frac{1}{4}$ of a pound of dried soup. How much food does he have in total pounds?

(25) Ellie has $6\frac{1}{8}$ ounces of gold, $3\frac{5}{6}$ ounces of silver, 4 ounces of platinum, and $\frac{1}{3}$ of an ounce of copper. How much metal does she have in total?