

Math 4. Class Work 28

Math Battle

Problems

1. A rectangle to the right has been partitioned into 9 squares. The area of the medium square is 100 m^2 . What is the area of the largest square?



2. x, y, k are three distinct digits. If we add all six three-digit numbers that can be written using these digits without repeating any digit within a number, we get 5328. Find these digits.
3. How can you cut off 21 m from a rope that is 32 m long without using any measuring devices?
4. Peter got C, B and A for the first 3 assignments. At home he told his parents that he got an A not for the third and B for the second assignment. In both cases he lied. For which assignment did he get a C?
5. Evelyn and Maria are eating a large bag of candy. Evelyn can eat all of it in 5 minutes; Maria can eat all of it in 10 minutes. How fast can they eat it together?
6. In a bike competition, the distance is 30 miles. A boy rode the first half of the distance at 14 mi/hr, and the second half, at 10 mi/hr. "Therefore", he argued, "my average speed was 6 mi/hr, so it should have taken me 5 hours to complete the distance". Was he right?

7. Compute:
$$\frac{2^2 + 2^2}{2^{-2} + 2^{-2}} =$$