

Math 4d, Homework 28.



1. Area of a rectangle is 20 cm^2 . One side is 5 cm. What is the other side?
2. One side of a rectangle is 2.5 cm longer than the other side. Perimeter of this rectangle is 25 cm. What are the sides?
3. Evaluate:

$$7\frac{1}{5} : 2\frac{4}{7} - 8\frac{3}{4} : \left(10 - \left(5\frac{1}{2}\right)^2 : 4\frac{2}{5}\right) + \left(3\frac{1}{8} \cdot 2\right) : \left(8\frac{1}{12} - 1\frac{5}{6}\right)$$

The answer is 1.

4. Peter drives with the speed of 50 miles per hour to visit his friend. The distance between the houses is 30 miles. How long does it take for him to get from home to a friend's house?
5. Peter went for a walk. He usually goes to the beach and returns home in 1 hour and 20 minutes. Distance from the beach to the house is 1.4 km. What is Peter's walking speed?
6. (*bonus problem) Usually, it takes Peter 1 hour and 20 minutes to drive to work. Yesterday there was a bad weather, Peter slowed down by 10 km / h and got to work in 1.5 hours. What is the distance between Peter's house and his work?
7. Prime factors of a number are 2,2,3,5. Find all divisors of this number.
8. Do the prime factorization of 66, 84, 90.
Find their GCD(GCF) and LCM.
9. Fill the empty spaces so that the equalities are true.
 - a. $\square \cdot (a + 10) = \square \cdot a + 20$
 - b. $3 \cdot (2 + 5) = \square \cdot \square + \square \cdot \square$
 - c. $\square \cdot m + 15 = \square \cdot (m + 5)$
 - d. $12 + \square \cdot x = \square \cdot (3 + 2x)$

10. The older brother can clean up the room in 2 hours, the younger brother can completely ruin it in 3 hours. In how many hours will the room be cleaned if they were locked together in the messy room?
(it's a math problem, the answer "they will play games" will not be accepted!)

