

Math 4. Homework #24



1. You just got a free ticket for a boat ride, and you can bring along 2 friends! However, you have 6 friends who want to come along. **How many different groups of friends could you take with you?**

2. Compute:

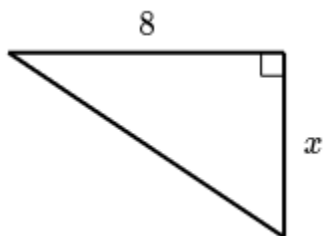
$$(-35) \times \frac{-1}{7} =$$

$$17 \times \frac{-1}{-17} =$$

$$\frac{-35}{\frac{5}{-7}} \times \frac{-1}{7} =$$

3. Two towns on the opposite banks of the same river are 30 km apart. It takes a motor-boat 2 hours to get from one side to another and 1 hour 30 min to return. Assuming the boat is traveling with the same speed (call it x) and the river's current is the same (call it y) try to write down system of equations for x and y and to solve it for x and y .

4. The area of the triangle depicted below is 24 cm^2 . Find x .



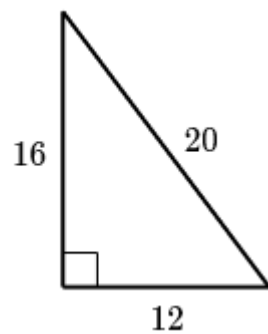
5. Solve equations:

$$(-5)x + (-34) = -(-16)$$

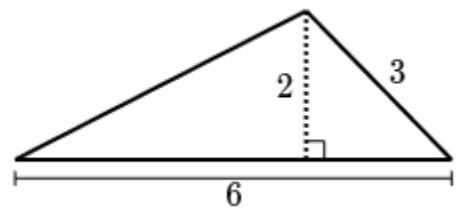
$$0.25(x + 0.2) = 10$$

6. Find the area (S) of the triangles

A



B



7. Compute:

a) $(0.456 - 0.356) 748 =$

b) $76 (3.14 - 0.23) - 0.23 (76 + 10) =$

8. Simplify:

$$\frac{1}{(1-x)x} - \frac{1}{x} - \frac{1}{1-x} =$$