Practice 2.2 (November 7)

Link to the poll: https://goo.gl/forms/CDXubqHnFvwBynnj1. Closed: Monday, 10 pm.

1. Use the number line to represent the fractions 7/2 and 2/3 and compute the division $\frac{7}{2} : \frac{2}{3}$ using that representation in the line. Use the mesh in the figure, paying special attention to the unit (the scale) you choose.
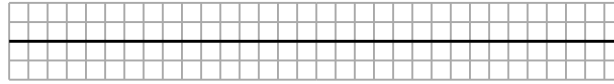
2. It is 5 pm and I have already spent one hour and a half grading exams. I still have 2/5 of the exams in the pile, without a grade. If I continue to grade exams at the same rate, when will I finish?

3. Urban population in a certain province is 5/8 of the total, and the remaining 3/8 are rural population. It is known that 1/4 of the urban population and 1/6 of the rural population are under 18 years. What proportion of the total population is less than 18 years old?

4. There are four types of sandwiches in a counter. 1/5 of them are Tuna, 1/4 of them are either cheese of egg and the rest are chicken sandwiches. We know that there are three times as many cheese sandwiches as egg sandwiches.

   a) What fraction of the sandwiches are chicken sandwiches?
   b) What fraction of the sandwiches are egg sandwiches?

5. A stick 108 cm long is broken in two pieces. We know that 3/5 of the longer piece are equal to 3/4 of the shortes piece. How long is each piece?

6. A teenager spent 1/4 of his weekly pay in the cinema. After that, he spent 2/5 of the rest in transportation. If we know that at the end of the week he spent 6 euros buying a book and he managed to save 1/5 of the weekly pay, how much was his weekly pay?

7. Luis and Nuria made greeting cards over two days. On Saturday, Nuria made 19 cards more than Luis. On Sunday, Nuria made 20 cards, and Luis made 15 cards. If we know that over the weekend Nuria made 3/5 of the total number of cards, how many cards did Luis make?

8. The area of the shaded region is 1/4 of the area of the square and 1/3 of the area of the big rectangle. What fraction of the total figure is shaded? The figure to the right can help you to understand the problem.
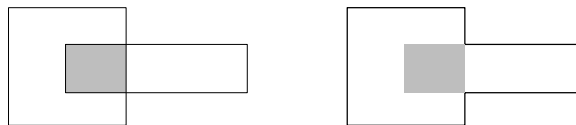
9. We have a bathtub with two faucets. It takes 1 hour for the hot water faucet to fill in the bathtub, while it takes 30 minutes for the cold water faucet. If both faucets are opened at the same time, and the flow in each of them is the same as when they were opened alone, how long will it take for the bathtub to be full of water?

10. A lion can eat a sheep in 4 hours, a leopard needs 5 hours and a bear needs 6 hours. How long will take them to eat the sheep if they eat together at the same speed as when they eat alone?