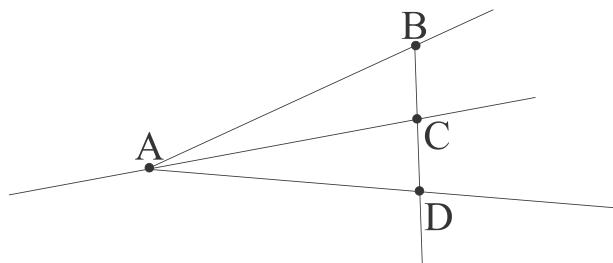


Math 4d. Homework 25.

1. Name all lines, segments and rays on the picture below. (Example : segment [BC])



2. A farmer has a cow, a goat and a goose. The cow and the goat will eat all the grass on his meadow in 45 days, the cow and the goose will eat all the grass on the same meadow in 60 days, and the goat and the goose will eat all the grass on the meadow in 90 days. How many days will it take them altogether to eat all the grass on the meadow? (we assume that the new grass is not growing.)

3. Evaluate:

a. $\frac{\left(\frac{3}{4} - \frac{1}{3}\right) : \frac{5}{7}}{\left(\frac{1}{4} + \frac{2}{3}\right) \cdot \frac{6}{11}};$ b. $\frac{\frac{3}{20} \cdot \left(\frac{7}{12} - \frac{1}{2}\right) + \frac{79}{80}}{\frac{13}{24} : \left(\frac{7}{12} + \frac{1}{2}\right) - \frac{1}{4}};$ c. $\frac{\left(3 + \frac{7}{11}\right) \cdot \frac{1}{4} - \frac{1}{22}}{\left(5 - \frac{3}{11}\right) : 13 + \frac{1}{2}}$

4. I need to put square tiles on the floor of a square room. I know that I can do it without cutting any of the tiles. First, I put tiles along the perimeter of the room, which took me 56 tiles. How many tiles do I need altogether to cover the floor in this room?

5. Using the distributive property factor the common factor out:

(example: $9 + 3a = 3 \cdot 3 + 3 \cdot a = 3 \cdot (3 + a)$):

a) $8 + 18w =$

b) $10 - 12p =$

c) $33s - 11 =$

d) $25a - 5b =$

e) $2x + 2 =$

6. In the picture on the right, set M represents students of the 4-th grade who participated in the math Olympiad, set L represents 4-th graders who participated in the Literature Olympiad, and set E represents the English Olympiad participants. How many students,

- a. Participated in the Math Olympiad?
- b. In the Math and English Olympiads?
- c. In the Literature and English Olympiads?
- d. In any of the three Olympiads?
- e. In all three Olympiads?
- f. In any two Olympiads?
- g. How many 4-th graders did take part in Olympiads?
- h. How many students did not participate in any Olympiad, if there are 60 students in the 4th grade?

