

Proportional Reasoning



3. What is proportional reasoning?

Think!

Don't solve this problem mathematically, don't get a "number-result"! Just read and think!

Yesterday, Mrs. Jones made some word problems to use in the math lessons. But they got all mixed up! Can you help Mrs. Jones to put some order in the word problems? Look at the problems very carefully and try to make groups of problems that belong together.



A Ellen and Kim are running around a track. They run equally fast but Ellen started later. When Ellen has run 5 rounds, Kim has run 15 rounds. When Ellen has run 30 rounds, how many has Kim run?

B Mama put 3 towels on the clothesline. After 12 hours they were dry. The neighbour put 6 towels on the clothesline. How long did it take them to dry?

C Mama buys 2 trays of apples. She then has 8 apples. Grandma buys 10 trays of apples. How many apples does she have?

D John runs a bakery. He uses 10 kg of flour to make 13 kg of bread. How much bread can he make if he uses 23 kg of flour?

E The locomotive of a train is 12 m long. If there are 4 carriages connected to the locomotive, the train is 52 m long. If there were 8 carriages connected to the locomotive, how long would the train be?

F Today, Bert becomes 2 years old and Lies becomes 6 years old. When Bert is 12 years old, how old will Lies be?

G A group of 5 musicians plays a piece of music in 10 minutes. Another group of 35 musicians will play the same piece. How long will it take this group to play it?

H Yesterday, a boat arrived at the port of Rotterdam, containing 326 "Nissan Patrol" cars. The total weight of these cars was 521 tons. Tomorrow, a new boat will arrive, containing 732 "Nissan Patrol" cars. What will be the total weight of these cars?

(Exercise created by Dirck De Bock, Wim Van Dooren and Lieven Verschaffel, Catholic University of Leuven), Belgium)