

Grade: 5 Category: Factoring Sub Category: LCM and GCF Word Problems Worksheet #: 181 Q

Dan is shipping two boxes, one with cleats and one with helmets to a football team. One box of cleats comes with 8 cleats and the box of helmets comes with 7 per box. How many boxes of each will Dan ship the football team if they want an equal number of cleats and socks? Camil Habib wants to plant seeds for 16 of plant X, 96 of Plant B, and 80 of plant C. If he spreads them all into even rows of one plant per row, what is the most he can plant per row? JimJim was solving a question about LCM on his math exam. The question asked him to find the LCM of 48 and 32, and he answered 96. Is he correct? If so, prove why. If not, solve for the real answer.



Grade: 5 Category: Factoring Sub Category: LCM and GCF Word Problems Worksheet #: 181 A

Dan is shipping two boxes, one with cleats and one with helmets to a football team. One box of cleats comes with 8 cleats and the box of helmets comes with 7 per box. How many boxes of each will Dan ship the football team if they want an equal number of cleats and socks?

First, you know that there's 8 cleats in one box, and 7 helmets. You want an equal amount, and will have to find the Greatest Common Factor to see what number they both match at.

7,14,21,28,35,42,49,56 (Helmets)

8,16,24,32,40,48,56 (Cleats)

They both match at 56, which is the 8th GCF of 7, and the 7th GCF of 8. This means that you need 7 boxes of cleats and 8 boxes of helmets.

Camil Habib wants to plant seeds for 16 of plant X, 96 of Plant B, and 80 of plant C. If he spreads them all into even rows of one plant per row, what is the most he can plant per row?

First, you must understand the question. He wants to plant them all into EQUAL rows, i.e. 4 per row of each seed (not the right answer)

16: 1, 2, 4, 8, **16**

96: 1, 2, 4, 8, 12, **16**, 24, 32, 48, 96

80: 1, 2, 4, 8, 10, **16**, 20, 40, 80

The most you can plant per row is 16.

JimJim was solving a question about LCM on his math exam. The question asked him to find the LCM of 48 and 32, and he answered 96. Is he correct? If so, prove why. If not, solve for the real answer.

For this question, all you have to do is solve for the LCM of 48 and 32 for yourself and verify whether his answer is correct or not.

48, **96**

32, 64, **96**

Jim is in fact correct

The LCM is 96. (For proving, you basically did so by solving for it.)