GCF & LCM · Grade 7

Name _____ Date _____ Score _____ / 12

01 GCF of 42 and 49 = ____

02 LCM of 14 and 21 = ____

03 Prime factorization of 270 = ____

04 Prime factorization of 198 = ____

05 GCF of 14, 28 and 49 = ____

06 LCM of 5, 10 and 11 = ____

07 GCF of 20, 24 and 32 = ____

08 LCM of 3, 4 and 13 = ____

09 Red boxes are 16 cm tall and blue boxes are 24 cm tall. A stack of red boxes and a stack of blue boxes are the same height. What is the shortest that height can be? Do you need the GCF or the LCM?

Answer: _____

10 A camp has 12 Grade 7 students and 30 Grade 8 students. Each team gets the same number of each grade, using every student. What is the greatest number of teams?

Answer: _____

11 A 60 cm by 84 cm board is cut into equal squares with no waste. What is the side length of the largest square possible?

Answer: _____

12 Isaac shares 35 granola bars and 42 juice boxes equally among gift bags, using them all. What is the greatest number of bags?

Answer: _____

GCF & LCM · Grade 7 (Answer Key)

01 GCF of 42 and 49 = **7**

02 LCM of 14 and 21 = **42**

03 Prime factorization of 270 =

$2 \times 3^3 \times 5$

04 Prime factorization of 198 =

$2 \times 3^2 \times 11$

05 GCF of 14, 28 and 49 = **7**

06 LCM of 5, 10 and 11 = **110**

07 GCF of 20, 24 and 32 = **4**

08 LCM of 3, 4 and 13 = **156**

09 Red boxes are 16 cm tall and blue boxes are 24 cm tall. A stack of red boxes and a stack of blue boxes are the same height. What is the shortest that height can be? Do you need the GCF or the LCM?

LCM: 48 cm

10 A camp has 12 Grade 7 students and 30 Grade 8 students. Each team gets the same number of each grade, using every student. What is the greatest number of teams?

6 teams

11 A 60 cm by 84 cm board is cut into equal squares with no waste. What is the side length of the largest square possible?

12 cm

12 Isaac shares 35 granola bars and 42 juice boxes equally among gift bags, using them all. What is the greatest number of bags?

7 bags