

# 43L1 WKST

## Practice

Write the prime factors of each number.

1. 12                      2. 16                      3. 28  
4. 63                      5. 144                      6. 225

Factor fully.

7.  $4xy^2$                       8.  $18a^2b^3$                       9.  $36x^2yz^2$   
10.  $10x^2y$                       11.  $54x^5$                       12.  $125a^4b^2$

Determine the GCF of each pair.

13. 15, 20                      14. 16, 24                      15. 27, 36  
16. 28, 42                      17. 48, 72                      18. 64, 96

Determine the GCF of each pair.

19.  $4a, 6a$                       20.  $2x^2, 3x$   
21.  $12m^3, 10m^2$                       22.  $12abc, 3abc$   
23.  $2x, 4y$                       24.  $14a, 7b$   
25.  $5x^2, 10x$                       26.  $4xy, 5xy$   
27.  $9mn^2, 8mn$                       28.  $2a^3, 8a^2$   
29.  $15bc, 25b^2c$                       30.  $6x^2y^2, 9xy$

Determine the GCF of each set.

31.  $5xyz, 10abc, 25pqr$   
32.  $20x, 10x^3, 8x^2$   
33.  $12abc, 18ab, 6ac$   
34.  $10x^2y, 15xy^2, 25xyz$   
35.  $21a^2b, 35a^2b^2c, 49ab^2c$   
36.  $12xy, 16x^2y, 20xyz$   
37.  $56abc, 64a^2b, 36ab^2c$

Find the GCF.

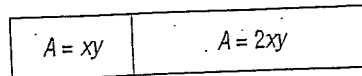
38.  $x^2y^2, x^2y^3, x^3y^4$   
39.  $2x^3y, 4x^2y^4, 2x^2y^4$   
40.  $3x^2y^3, 3x^3y^2, 6xy^2$   
41.  $4a^3b^3, 8a^2b^3, 16ab^3$   
42.  $10s^4t^5, 5s^5t^4, 15s^3t^4$

## Problems and Applications

43. Montreal has 162 wet days a year, whereas Beijing has 66. What is the GCF of these numbers?

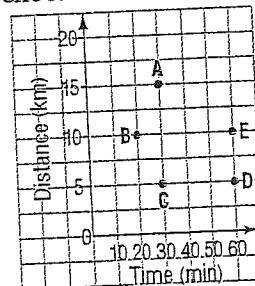


44. Two rectangles are attached as shown.



What is the length of the common side? Explain.

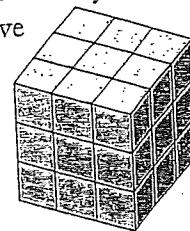
45. Suppose students can get to school by walking at 5 km/h, riding a bike at 10 km/h, or being driven in a car at 30 km/h. Bob rides a bike, as does Karin. Bob lives the same distance from the school as Collette, who walks. Gustav and Shirley come by car. Karin and Gustav live the same distance from school. The graph gives the times the five students take to get to school one day.



- a) Which person does each point represent? Give reasons for your answers.  
b) Draw a map of the area, showing where each student could live. Compare your map with a classmate's.

## LOGIC POWER

If the outside of the large cube is painted red, how many of the smaller cubes have the following numbers of red faces?



- a) 3                      b) 2  
c) 1                      d) 0