

Homework for Lesson № 23

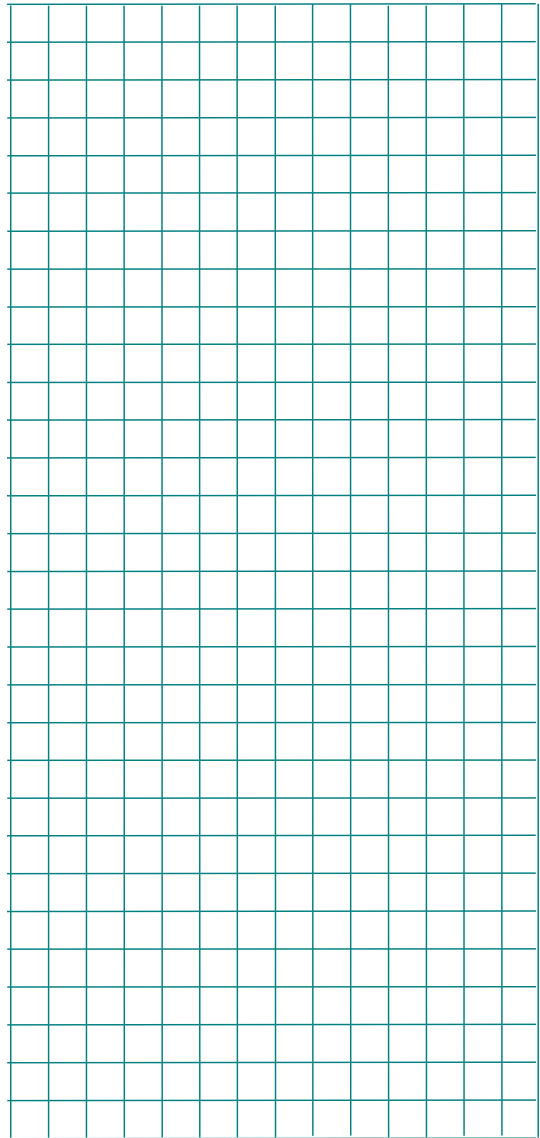
1 Make any needed drawings to solve the word problems:

A. Seven boxes contain 28 kg of apples. How many boxes contain 36 kg of apples?

B. Seven boxes contain 28 kg of apples. How many boxes contain w kg of apples?

C. Seven boxes contain y kg of apples. How many boxes contain w kg of apples?

D. m boxes contain y kg of apples. How many boxes contain w kg of apples?



2 Do each problem **in your notebook** and copy your results here:

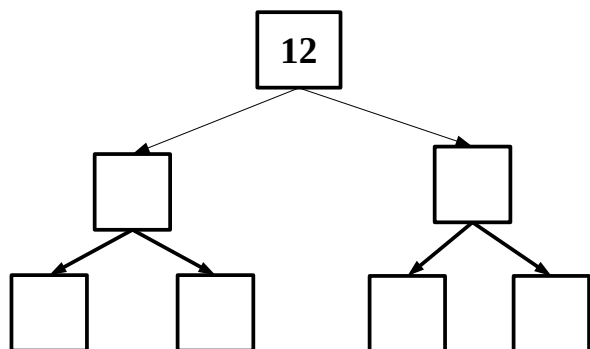
a). $204 \div 12 = \underline{\hspace{2cm}}$ $1890 \div 42 = \underline{\hspace{2cm}}$ $546 \times 21 = \underline{\hspace{2cm}}$

b). $43 = 7 - 3x$ $14 - x : 3 = 4$ $24 - 20 : x = 19$

$x = \underline{\hspace{2cm}}$ $x = \underline{\hspace{2cm}}$ $x = \underline{\hspace{2cm}}$

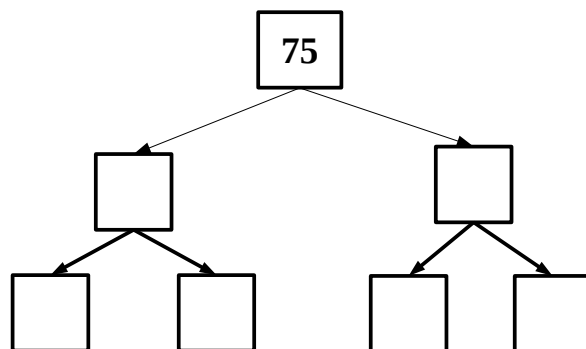
c). When five times a number is decreased by 1, it has the same value as four times the number increased by 10. What is the number? $\underline{\hspace{2cm}}$

3 Using the tree method find the sets of prime factors for each of the following numbers: 12, 75, 24, 16. Write these factors into Venn Diagrams. **Note,** sometimes you might not need all squares. Other times you might actually have to draw additional squares to complete the task.



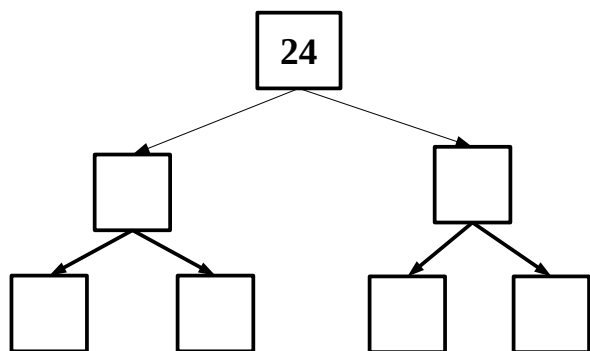
$$12 = _ \times _ \times _ \times _$$

12



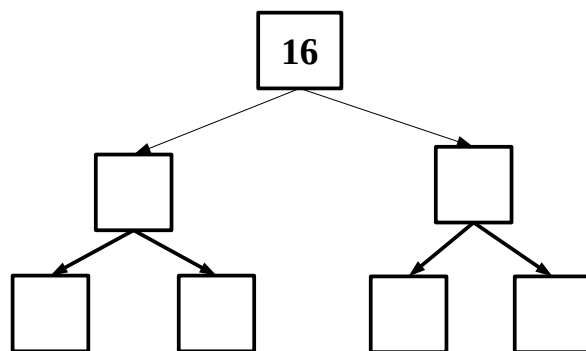
$$75 = _ \times _ \times _ \times _$$

75



$$24 = _ \times _ \times _ \times _$$

24

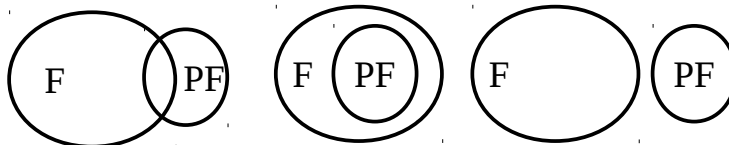


$$16 = _ \times _ \times _ \times _$$

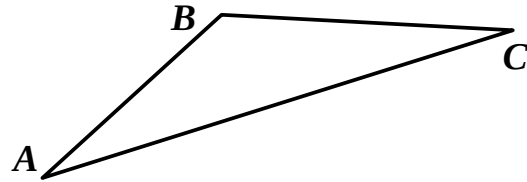
16



4 Which diagram represents the sets of all factors of a number and the set of its prime factors?



- 7 Using a straight edge and a compass construct $\triangle A'B'C'$ with sides twice longer than those of the $\triangle ABC$.



- 8 Explain which transformation produced the red shape from the green shape. Try to make a corresponding blue shape using the same transformation of the red shape.

