

1. Write the following as mathematical expression. If this expression is an equation, solve it.

Example:

The product of numbers m and 3: $3m$

- The sum of the numbers x and 15 is equal to 20.
 - The product of numbers y and 10.
 - The difference between three times z and 4 is equal to 12.
 - Half of the number b is equal to 1.5
 - The product of the numbers 5 and x is less than 12.
2. 10 identical notebooks cost x dollars. One textbook costs 15 dollars more than one notebook (write expressions).
- What is the price of one notebook?
 - What is the price of the textbook?
 - What is the price of n notebooks?
 - What is the price of n notebooks and m textbooks?
3. The sum of three consecutive odd numbers is 135. What is the smallest of the three numbers?
4. Mary bought 5 apples and 2 pears for \$4.60. Eva bought 8 apples and 6 pears for \$9.6. Veronica bought 3 apples and 3 pears. How much change did she get back from \$5.00?
5. Evaluate:

a. $\left(-\frac{1}{2}\right)^3$; b. $\left(\frac{1}{2}\right)^3$; c. $\left(-\frac{1}{3}\right)^2$; d. $\left(\frac{1}{3}\right)^2$

6. Mary has two cats, Omelet and Doughnut. Each morning she gives them a box of cat food. Omelet can eat the whole portion of food in 15 minutes and Doughnut can eat it in 10 minutes. How many minutes do they need to eat all the food together?



This Monday Mary put the food into the cat bowl when only Omelet was in the kitchen and he was eating it alone for 5 minutes. Then Doughnut smelled the food and joined Omelet in the kitchen. How long will it take them to eat the rest of the food together?



7. A snapping turtle and a painted turtle start to go down to the lake at the same time. The snapping turtle is 80 meters from the lake, and he can crawl 125 cm every 5 minutes. The painted turtle is 16 meters further away from the lake, but

he can crawl 12 dm every 4 minutes. Which turtle reaches the lake first if they keep on going by their own speeds and never rest?

8. Fill the empty cells in the table:

a	5			10			
a^2		9			400		36
a^3			8			64	