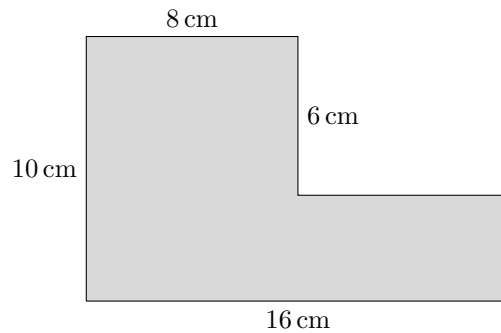


This is a collection of some the questions a student would have encountered before Pre-Algebra. Do your best to answer each question. You can use additional sheets of paper. If you don't know how to solve a problem then now is a great time to learn.

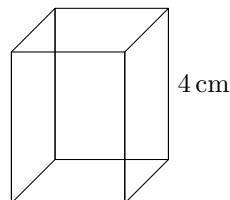
1. How many 4×4 squares can fit inside a rectangle with a height of 36 and width of 24?
2. Write the prime factorization of 360. (I.e. write 360 as a product of prime numbers.)
3. A distance runner ran 4 km in 12 min. What was their speed in km per hour?
4. Compute the value of $32.35 \div 0.2$.
5. What is the area of the figure below?



6. What is 65% of 220?
7. What is the least common multiple of 24 and 15?
8. What value of x makes the equation below true?

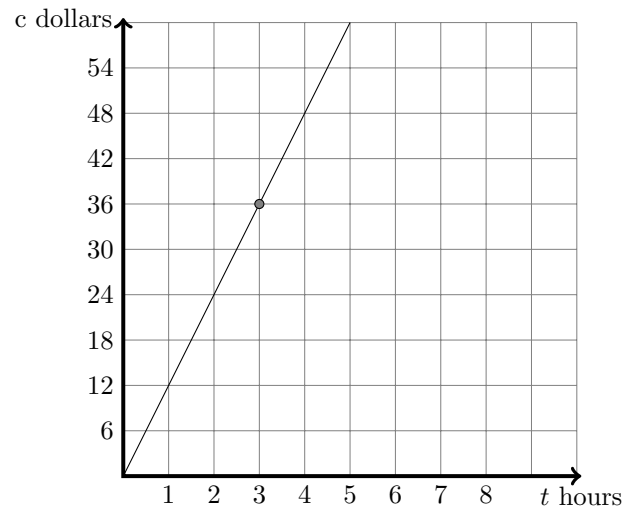
$$x - 5.7 = 13\frac{1}{2}$$

9. A 24 ft long board is cut into pieces that are $1\frac{1}{3}$ of a foot in length. How many total pieces are obtained?
10. A scale shows that 9 bananas weigh the same as 6 apples. How many bananas will weigh the same as 4 apples?
11. Find the mean, median, and mode of the numbers 1, 2, 7, 5, 15, 2, 3.
12. A rectangular prism has a volume of 36 cm^3 . It's height is 4 cm and **its base is square**? What is the total surface area of all 6 sides of the prism?



13. A factory can produce 4 robots in 30 minutes. How many **hours** will it take to produce 26 robots.
14. For a fundraiser, a club sold two types of candles: red and green. Three fifths of the candles they sold were green. If they sold 48 green candles, how many red candles did they sell?

15. The graph below shows the total cost, c in dollars, for renting a bike for t hours.



Write an equation that relates c and t . Then explain the meaning of the point on the graph using correct units.