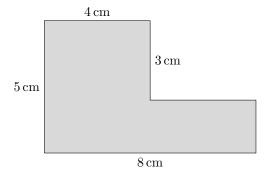
This is a collection of some the questions a student would have encountered before Pre-Algebra. Do your best to answer each question. You can use additional sheets of paper. If you don't know how to solve a problem then now is a great time to learn.

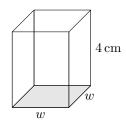
- 1. How many  $4 \times 4$  squares can fit inside a rectangle with a height of 36 and width of 24?
- 2. Simplify:  $\frac{1}{2} + \frac{1}{4} \frac{1}{3}$
- 3. A distance runner ran 4 km in 12 min. What was their speed in km per hour?
- 4. Compute the value of  $32.35 \div 0.2$ .
- 5. What is the area 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?

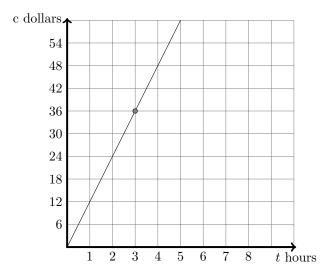
$$x - 5.7 = 13\frac{1}{2}$$

- 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  $36 \,\mathrm{cm}^3$ . It's height is  $4 \,\mathrm{cm}$  and its base is square with length w? What is the area of the gray base 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.