

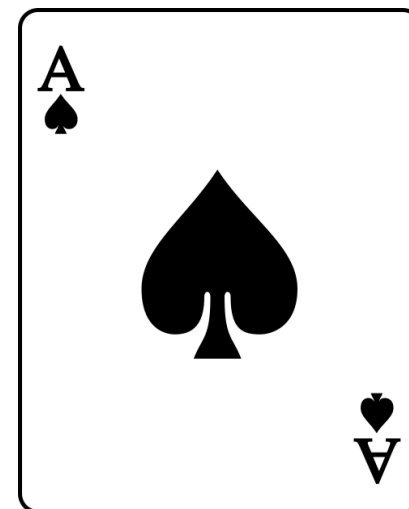
Solve each equation:

a. $5x + 75 = 75 + 5x$

b. $5x + 75 = -5x + 75$

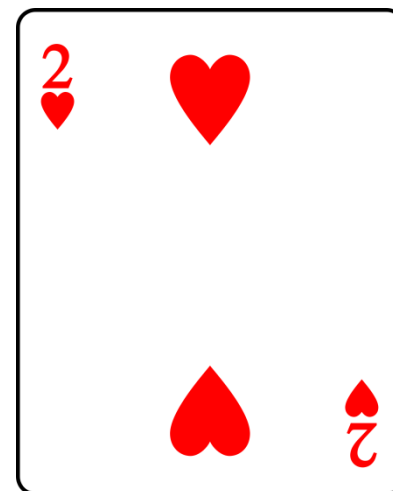
c. $5x - 75 = 5x + 75$

d. $75 - 5x = 5x - 75$



Solve the equation:

$$4 + 2(6x - 10) - 9x = -4(3x - 3x + 12 - 8)$$



In one physical education class, $\frac{5}{8}$ of the students were playing basketball. After 3 more students joined, 18 students were playing basketball.

$$\frac{5}{8}x = 18 + 3x$$

$$\frac{5}{8}(x + 3) = 18$$

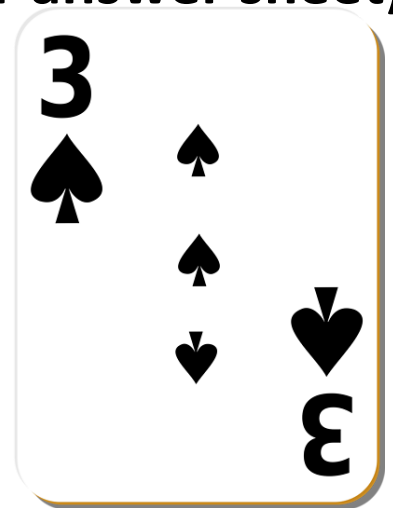
$$\frac{5}{8}x = 18 - 3$$

$$18 = \frac{5}{8}x - 3$$

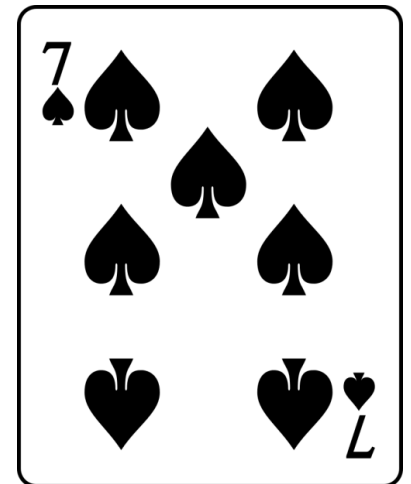
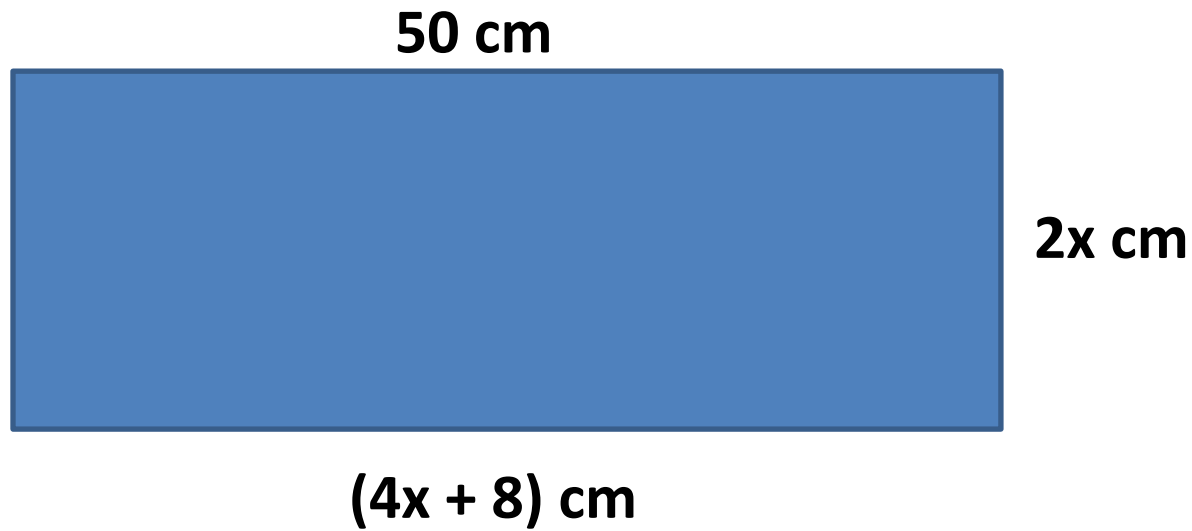
$$\frac{5}{8}x + 3 = 18$$

$$\frac{5}{8}x + 3x = 18$$

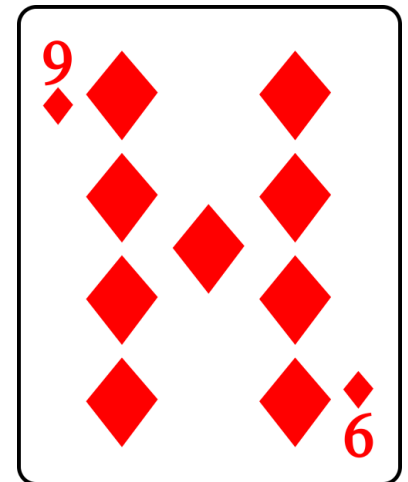
- Copy all the equations that could represent this situation.
- Find how many students were in the class.
- Check your solution by substituting it into one of the valid equations. **(Copy answers to ALL PARTS onto your answer sheet)**



Find the perimeter of this rectangle.

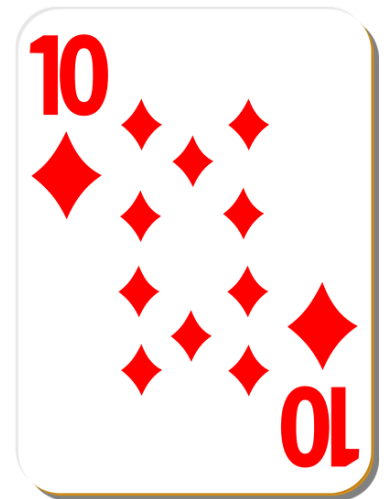


Doc, Grumpy, Happy, Sleepy, Bashful, Sneezy, and Dopey were all mining for jewels. Doc, Grumpy, Bashful, and Dopey all found the same amount of jewels. Happy was extra energized and found triple the amount that Doc (and the other three) did. Sneezy was too busy sneezing and found 6 fewer jewels than Doc (and the other three) did. Sleepy fell asleep and didn't find any jewels. Altogether, the dwarves found 90 jewels. How many jewels did each dwarf find?



Rapunzel's hair was originally 90 feet long, but something strange has happened, and her hair is starting to *shrink*. Her hair is getting 3 feet shorter every day. Meanwhile, Lord Voldemort's head was originally bald, but something equally strange has happened, and his hair is growing 1.5 feet per day. **(Copy answers to ALL PARTS onto your answer sheet)**

- Define a variable and write an equation that would figure out when their hair is the same length.
- How long will it take for Rapunzel's and Lord Voldemort's hair to be the same length? How long will their hair be at this point?



Solve the equation. Then check your answer. If your answer doesn't work, your solution is incorrect!

$$\frac{4x - 4}{4} + 4 = 44$$



From ground level to the tip of the torch, the Statue of Liberty and its pedestal are 92.99 meters tall. The pedestal is 0.89 meter taller than the statue. How tall is the Statue of Liberty? (Just the statue part)

