

Name _____

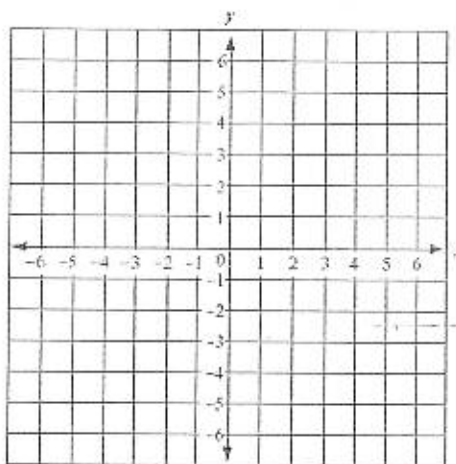
8th grade Math
2nd Quarter – REVIEW

Work harder
than you
think you did
yesterday.

Solve the system of linear equations by graphing.

A.

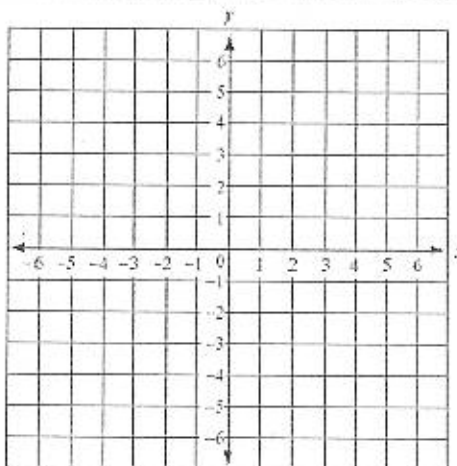
$$\begin{cases} y = 4x - 3 \\ y = -x + 2 \end{cases}$$



Solution _____

B.

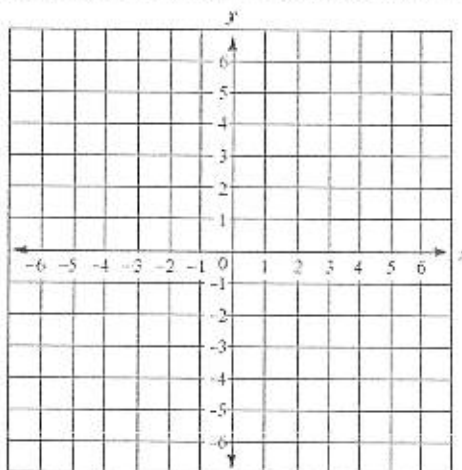
$$\begin{cases} y = -\frac{1}{2}x - 1 \\ y = \frac{1}{4}x - 4 \end{cases}$$



Solution _____

C.

$$\begin{cases} y = 3x - 4 \\ y = -\frac{1}{2}x + 3 \end{cases}$$



Solution _____

Solve the system. Justify your answer. Check your work.

D.

$$\begin{cases} y = 4x - 2 \\ y = -2x + 4 \end{cases}$$

Solution _____

Solve the following. SHOW ALL WORK!

D. Imagine your class is going to sell school t-shirts. The printer charges a \$150 set-up fee for the t-shirt design that you have created. Once the design is set, they charge \$4 for each t-shirt. You feel it is possible to sell the t-shirts for \$10. How many t-shirts do you have to sell before you break even?

Remember: The breakeven point is when your costs equal your sales. In other words, you don't make any money but you also don't lose any money.



E. It costs a man \$75 to buy the things he needs to make and sell hot dogs. The city allows him to sell hot dogs within a block of city hall, however, they will charge him \$1 for each hot dog sold. Calculate the breakeven point if the price he sells each hot dog for is \$1.50.

