

1) A boat moves 18 km/h in a lake. How long will it take to cover ...

a). ... 48 km in still water?

b). ... 48 km when it moves down a river flowing 6 km/h?

c). ... to come back the same 48 km when moving upstream?

2) A store is giving rewards to its customers at the register. Every 15th receives a free lollipop, every 24th receives a free chocolate bar. During that day 1000 customers visited the store. How many of them have received ...

a) a free lollipop? b) a free chocolate bar? c) both?

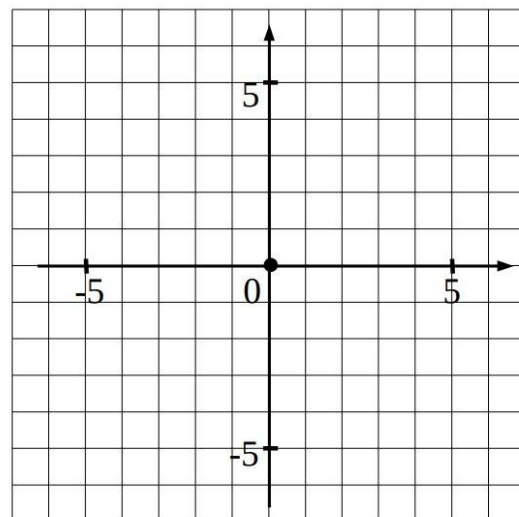
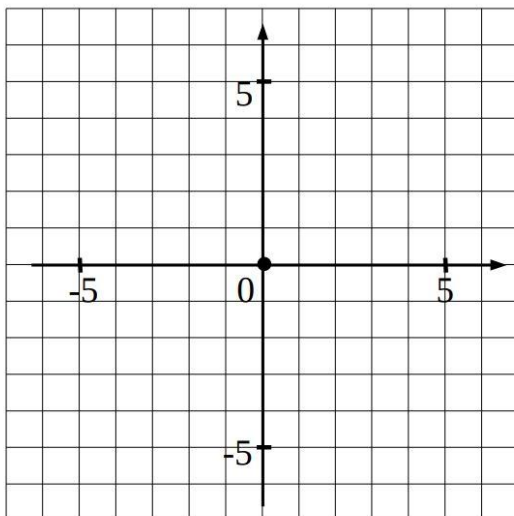
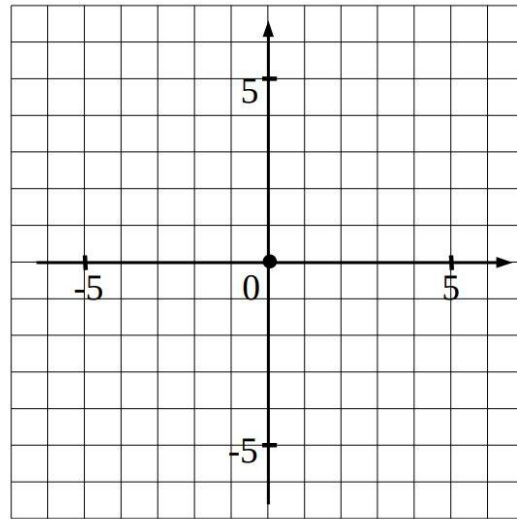
3) Plot vectors $\vec{e} = (3,2)$, $\vec{g} = (-1,3)$, and $\vec{x} = (0,-3)$.

Plot the following vector sums as well. (Extra grids are provided, if you need them)

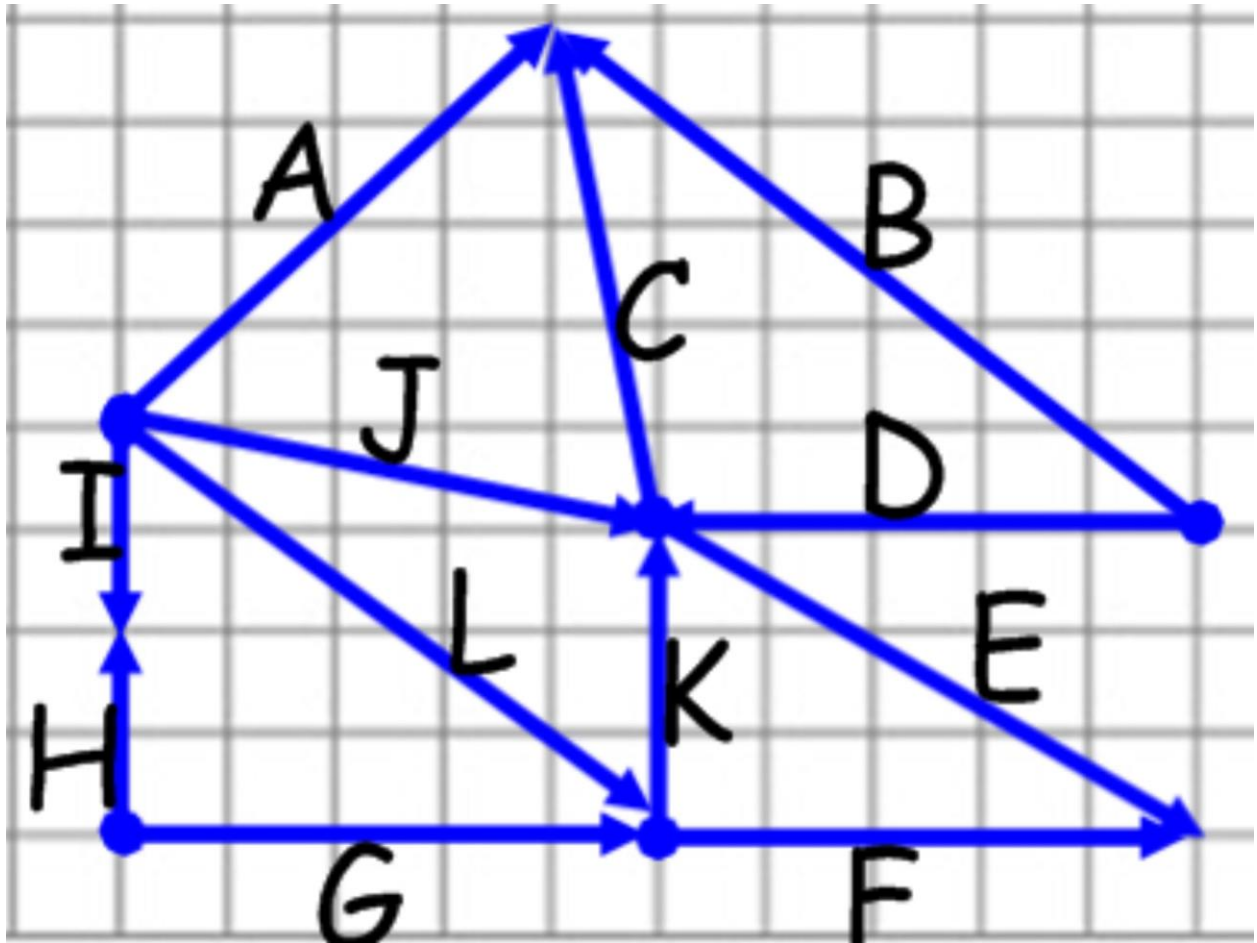
$$\vec{e} + \vec{g} = (\quad , \quad) \quad \vec{e} + \vec{x} = (\quad , \quad)$$

$$\vec{x} - \vec{g} = (\quad , \quad) \quad \vec{x} - \vec{e} = (\quad , \quad)$$

$$2\vec{x} = (\quad , \quad) \quad \vec{e} - 2\vec{g} = (\quad , \quad)$$



4) Using the following picture, answer True or False



a) $H = -I$

d) $E = L$

b) $A = J + C$

e) $J + E = L + F$

c) $A + B = J + D$

f) $D + E = K$