Info 1 2024 ősz 2. zh

Név* Neptun kód*

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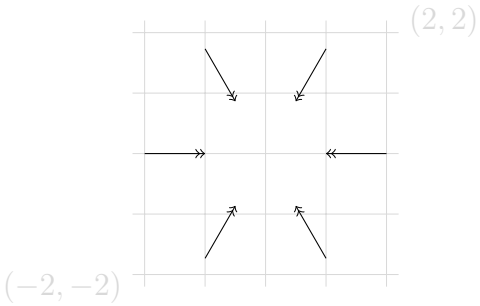
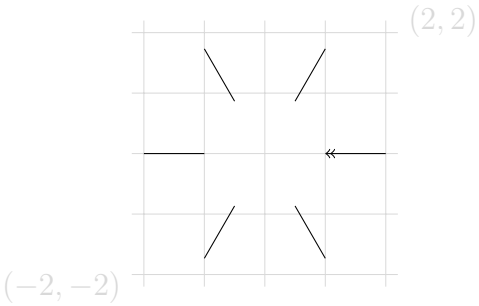
1.

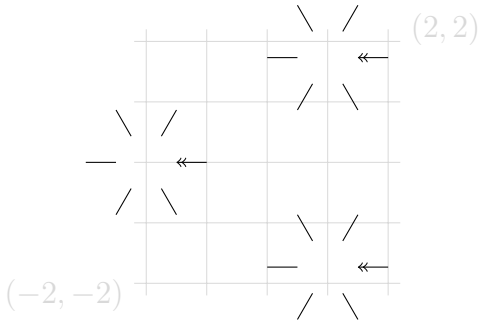
(A)



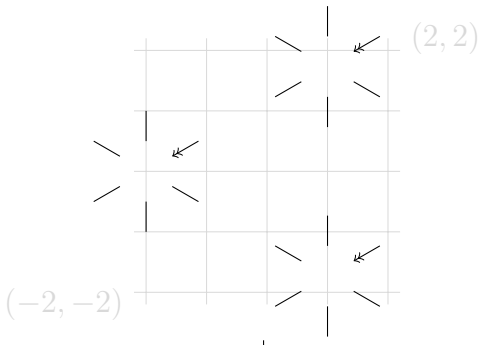
(B)



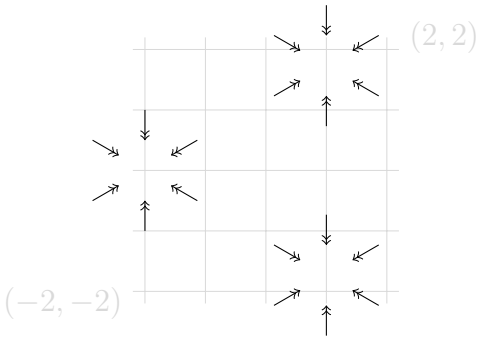
(C)



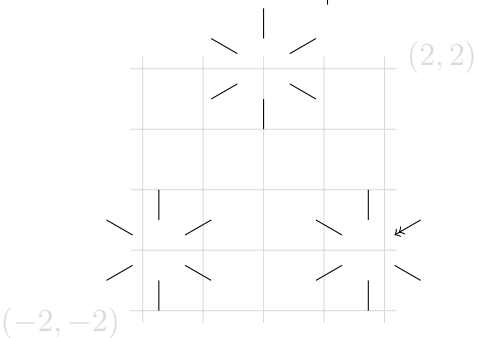
(D)



(E)



(F)



Forrás	Eredmény

```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \draw[->>,rotate=30]
  foreach \j in {60,180,300}
  {[shift = {(\j:2)}] (0,0)  foreach \i in {60,120,...,360}
    { (\i:1) -- (\i:0.5) }};
\end{tikzpicture}
```

```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \foreach \j in {60,180,300}
           {\draw[->>,shift = {(\j:2)}, scale=0.5] (0,0)
             foreach \i in {60,120,...,360} { (\i:2) -- (\i:1) };
  }
\end{tikzpicture}
```

```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \draw[->>] (0:2) foreach \i in {60,120,...,360}
       { (\i:2) -- (\i:1) } ;
\end{tikzpicture}
```

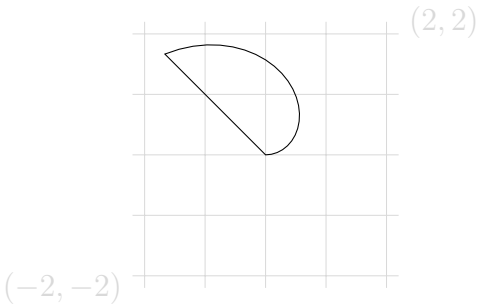
```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \foreach \i in {60,120,...,360}
           {\draw[->>] (\i:2) -- (\i:1) ; }
\end{tikzpicture}
```

```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \foreach \j in {60,180,300}
           {\draw[->>,shift = {(\j:2)},rotate=30] (0,0)
             foreach \i in {60,120,...,360} {(\i:1) -- (\i:0.5)};
  }
\end{tikzpicture}
```

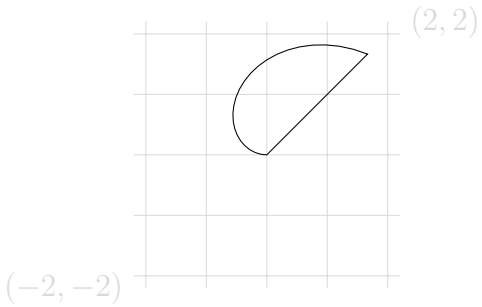
```
\begin{tikzpicture}
 \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}
  grid (2.2,2.2) node[above,right]{$(2,2)$};
  \foreach \j in {60,180,300}
           {\foreach \i in {60,120,...,360}
             {\draw[->>,shift = {(\j:2)},rotate=30,scale=0.5]
               (\i:2) -- (\i:1) ;}}
\end{tikzpicture}
```

2.

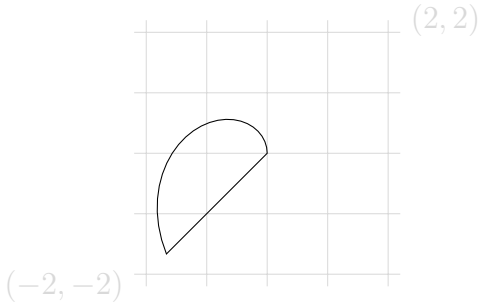
(A)



(B)



(C)



(D) `hibás forrás`

Forrás	Eredmény

`\begin{tikzpicture}`
` \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}`
`  grid (2.2,2.2) node[above,right]{$(2,2)$};`
`  \draw[rotate=90] plot[domain=0:3*pi/4] (deg(\x):\x) --cycle ;`
`\end{tikzpicture}`	

`\begin{tikzpicture}`
` \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}`
`  grid (2.2,2.2) node[above,right]{$(2,2)$};`
`  \draw plot[domain=-3*pi/4:0] ({deg(pi+\x)}:-\x) -- cycle ;`
`\end{tikzpicture}`	

`\begin{tikzpicture}`
` \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$}`
`  grid (2.2,2.2) node[above,right]{$(2,2)$};`
`  \draw[rotate=90] plot[domain=0:3*pi/4] ({deg(\x)}:\x) --cycle ;`
`\end{tikzpicture}`	

\begin{tikzpicture} \draw[very thin, gray!30](-2.2,-2.2) node[below,left]{$(-2,-2)$} grid (2.2,2.2) node[above,right]{$(2,2)$}; \draw plot[domain=0:3*pi/4] ({deg(\x)}:\x) --cycle ; \end{tikzpicture}	

3. (A) `11/7` (B) `1` (C) `1.57142857142857` (D) `16` (E) `2`

Forrás	Eredmény
`(11%7)^2`	
`11/7`	
`(11/7).n()`	
`mod(11,7)^2`	
`11//7`	

4. Legyen `v=vector([1,2,0]); m = matrix([[3,2,1],[1,-1,2],[1,2,1]])`
(A) `(1,-1,2)` (B) `(1, 2, 0)` (C) `(7, -1, 5)` (D) `5` (E) `3`

Forrás	Eredmény
`m.column(1).norm()`	
`m*(m.solve_right(v))`	
`v.dot_product(v)`	
`(m^(-1)*m^2).row(1)`	
`m*v`	