

Name: _____

Math 2030, Fall 2017, Quiz/Worsheet 1
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On the following coordinate grid, draw the following vectors.

1. $\vec{v} = (-2, 1)$

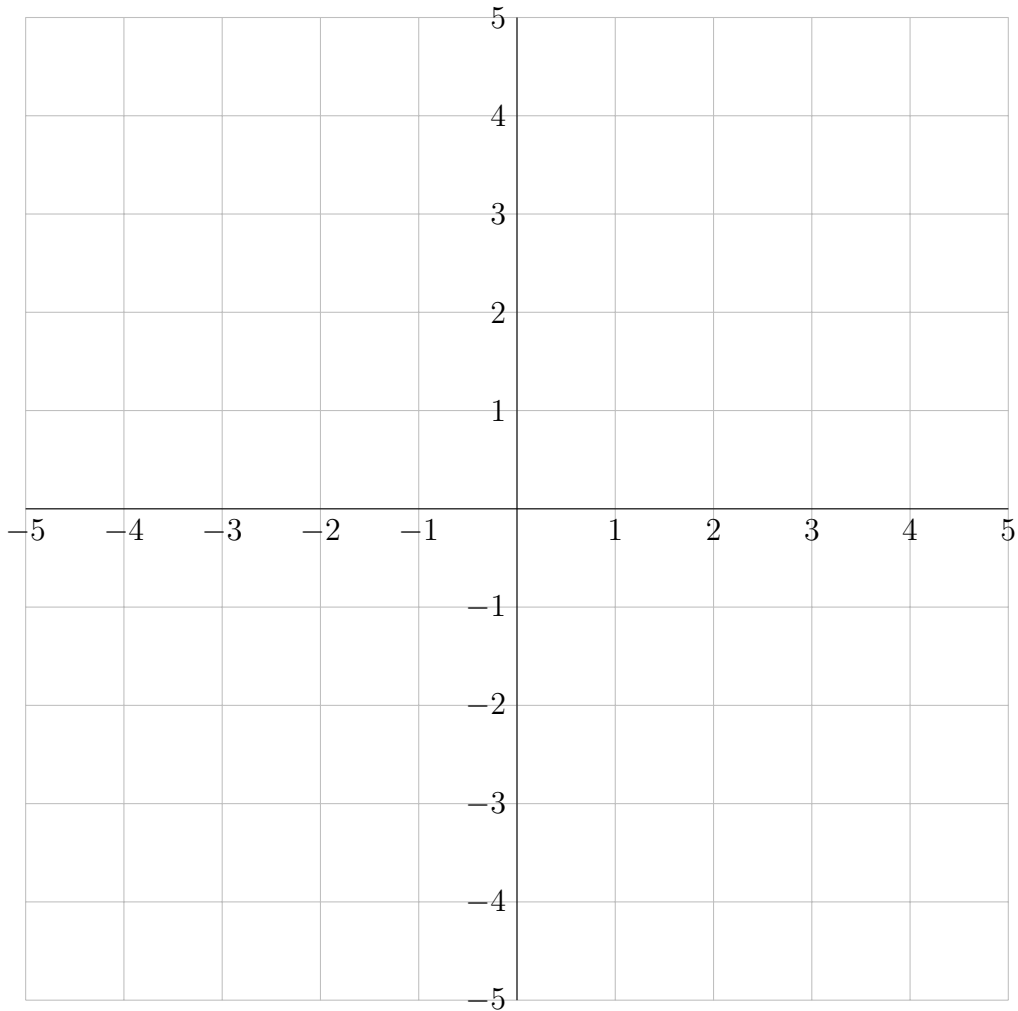
2. $\vec{w} = (3, 2)$

Compute and draw.

3. $\vec{w} - \vec{v} = (\quad , \quad)$

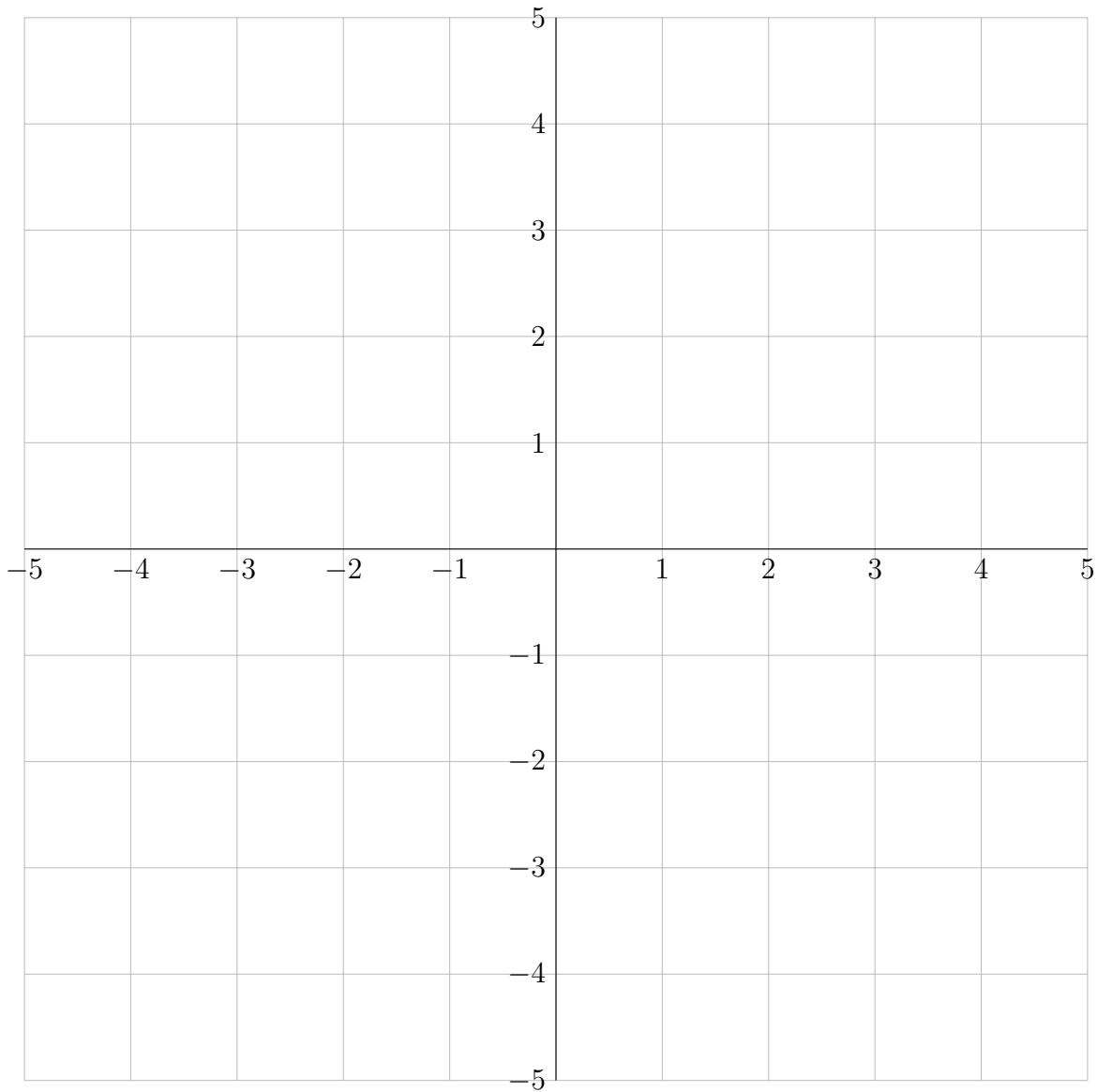
4. $-\vec{w} = (\quad , \quad)$

5. $2\vec{v} = (\quad , \quad)$



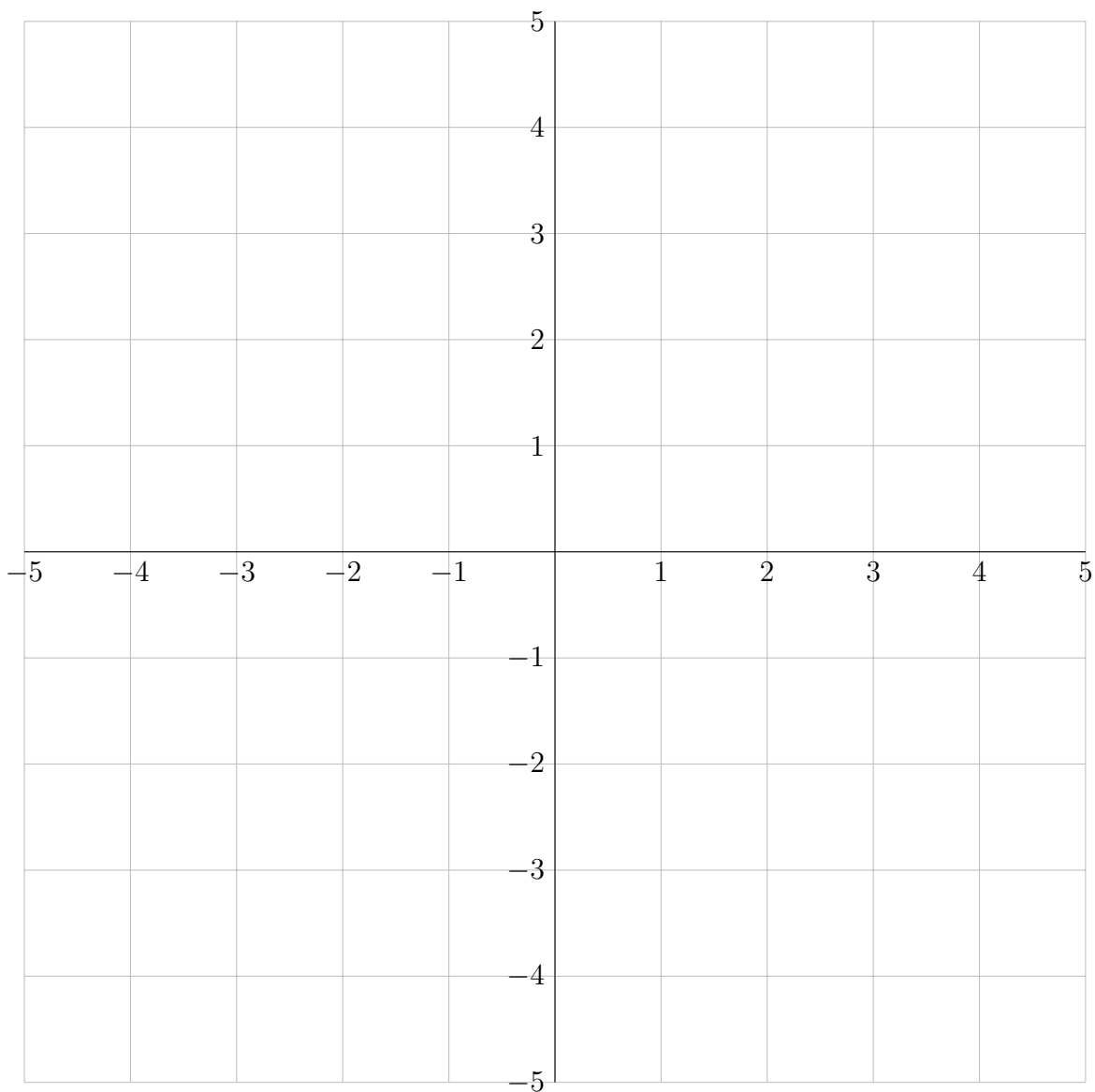
Let $\vec{v} = (-4, 4)$ and $\vec{w} = (4, 0)$. For each value of t in the chart below, compute the vector $t\vec{v} + (1-t)\vec{w}$. Plot them on the following coordinate grid, indicating the value of t at each.

t	0	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1
$t\vec{v} + (1-t)\vec{w}$	(,)	(,)	(,)	(,)	(,)



Let $\vec{v} = (-2, 1)$ and $\vec{w} = (1, 0)$. For each value of t in the chart below, compute the vector $t\vec{v} + (1-t)\vec{w}$. Plot them on the following coordinate grid, indicating the value of t at each.

t	-1	0	1	2
$t\vec{v} + (1-t)\vec{w}$	(,)	(,)	(,)	(,)



Write the equations for the circles

1. with center $(-3, -1)$ and radius 2, and
2. with center $(0, 3)$ and radius 1.

Sketch them on the following coordinate system and find the distance between them.

