

Name: _____

Date: _____

Unit 5 Review

For each type of question, the achievement level is indicated. Showing work is an important strategy in communicating your knowledge and ideas so please be thorough.

Learning Goal 5.1	I can graph integral coordinates in the four quadrants.
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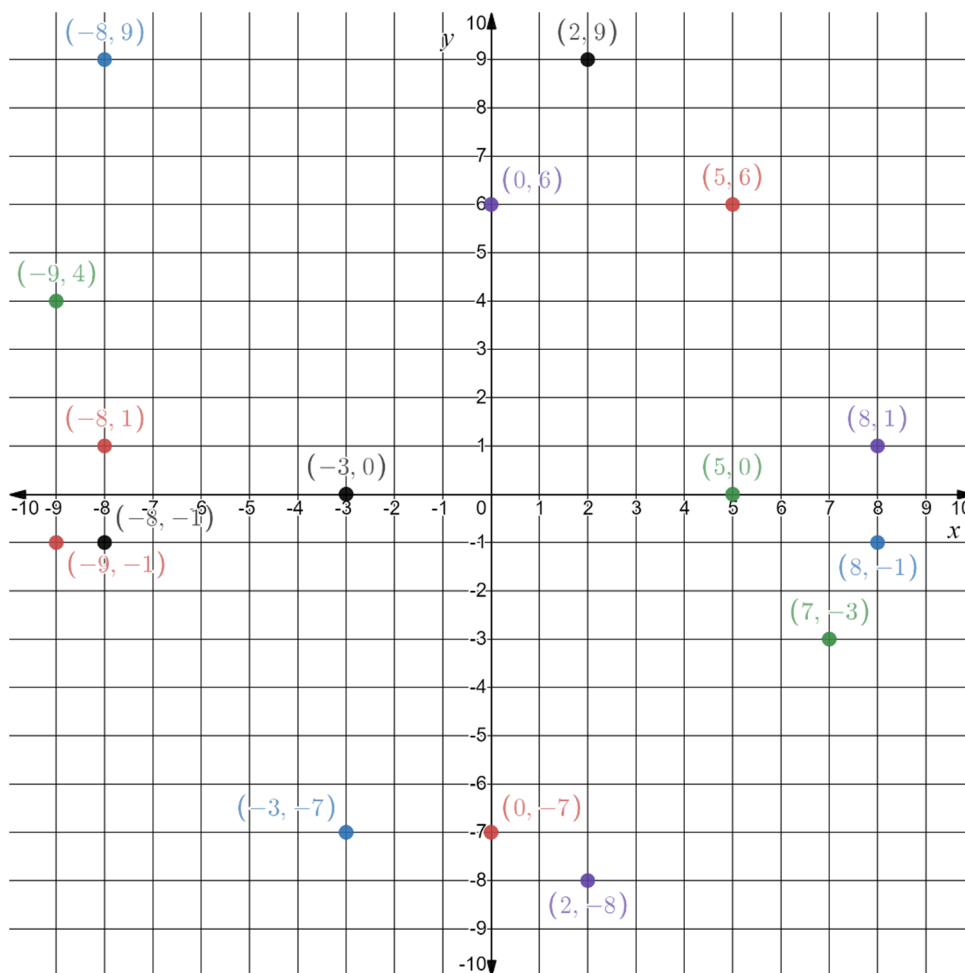
Developing

1. Predict the quadrant of the following coordinates.

2. Graph the coordinates.

a.	(5, 6) II	b.	(-3, -7) II II II	c.	(-9, 4) II II	d.	(2, -8) IV
e.	(2, 9) II	f.	(-9, -1) II II II	g.	(-8, 9) II II	h.	(7, -3) IV
i.	(8, 1) II	j.	(-8, -1) II II II	k.	(-8, 1) II II	l.	(8, -1) IV
m.	(5, 0) —	n.	(0, 6) —	o.	(-3, 0) —	p.	(0, -7) —

<https://www.desmos.com/calculator/9tvc2wcscu>



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Unit 5 Review

Proficient

3. Predict the quadrant of the following coordinates.

a. $(-293, 172)$ II II	b. $(739, -324)$ IV	c. $(1040, 8)$ I	d. $(-975, -832)$ III
e. $(0.354, 1.983)$ I	f. $(-\frac{1}{5}, \frac{6}{7})$ II	g. $(0.921, -\frac{7}{10})$ IV	h. $(-5.243, -0.001)$ III

Unit 5 Review

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Learning Goal 5.2	I can express relations as expressions, in a table of values and on a graph.
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Proficient

1. Make a table of values with $x = -5, -3, -1, 1, 3, 5$
2. Graph the ordered pairs from the table of values.

$y = 2x + 3$ a. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>-5</td><td>-7</td></tr> <tr><td>-3</td><td>-3</td></tr> <tr><td>-1</td><td>1</td></tr> <tr><td>1</td><td>5</td></tr> <tr><td>3</td><td>9</td></tr> <tr><td>5</td><td>13</td></tr> </tbody> </table>	x	y	-5	-7	-3	-3	-1	1	1	5	3	9	5	13	$y = -2x - 4$ b. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>-5</td><td>6</td></tr> <tr><td>-3</td><td>2</td></tr> <tr><td>-1</td><td>-2</td></tr> <tr><td>1</td><td>-6</td></tr> <tr><td>3</td><td>-10</td></tr> <tr><td>5</td><td>-14</td></tr> </tbody> </table>	x	y	-5	6	-3	2	-1	-2	1	-6	3	-10	5	-14	$y = x - 6$ c. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>-5</td><td>-11</td></tr> <tr><td>-3</td><td>-9</td></tr> <tr><td>-1</td><td>-7</td></tr> <tr><td>1</td><td>-5</td></tr> <tr><td>3</td><td>-3</td></tr> <tr><td>5</td><td>-1</td></tr> </tbody> </table>	x	y	-5	-11	-3	-9	-1	-7	1	-5	3	-3	5	-1	$y = -x + 7$ d. <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr><th>x</th><th>y</th></tr> </thead> <tbody> <tr><td>-5</td><td>12</td></tr> <tr><td>-3</td><td>10</td></tr> <tr><td>-1</td><td>8</td></tr> <tr><td>1</td><td>6</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>2</td></tr> </tbody> </table>	x	y	-5	12	-3	10	-1	8	1	6	3	4	5	2
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a. <https://www.desmos.com/calculator/yloh88tvqd>

b. <https://www.desmos.com/calculator/agt vx1dtdp>

c. <https://www.desmos.com/calculator/otfstmpspf>

d. <https://www.desmos.com/calculator/a1h3hfnfiw>

3. Klaus works after school. The graph shows his rate of pay.

a. Make a table of values from the graph.

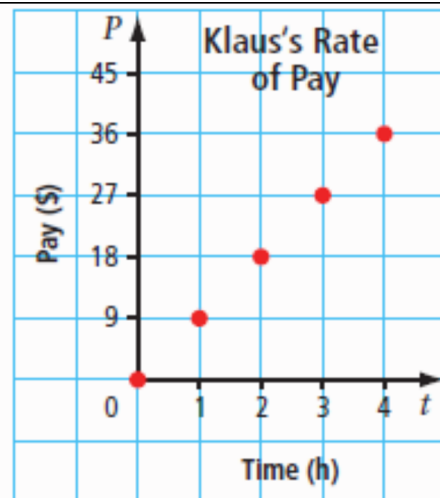
t	0	1	2	3	4
P	0	9	18	27	36

b. Does the graph represent a linear relation?
Explain.

Yes

c. Is it possible to have other points between the ones on this graph? Explain.

Yes



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Unit 5 Review

Extending

1. To rent a photo-booth for an event costs \$100 for the first hour and \$20 for each additional hour.
- a. Make a table of values showing the cost in relation to the number of hours rented for one to five hours.

h	1	2	3	4	5
C	100	120	140	160	180

- b. Draw a graph from the table of values.

<https://www.desmos.com/calculator/n2vgnj9bl>

- c. Write an expression for the cost in relation to the number of hours rented, h .

$$80 + 20h$$

- d. What is the cost if you rent the booth for 12 hours?

$$\$320$$

2. To go on a field trip, there needs to be one adult for every 6 children.

- a. Make a table of values showing the number of adults for 6, 10, 14, 18, 22 and 26 children.

h	6	10	14	18	22	26
C	1	2	3	3	4	5

- b. Draw a graph from the table of values.

<https://www.desmos.com/calculator/ufrttxa7gu>

- c. If there are 8 adults present, how many children could there be?

$$43 - 48$$