This is your review guide for the Chapter 6 Quiz. These problems are from your notes, so look up the answers in your notes (or my notes at mrsspisak. weebly.com) to make sure you did the review problems correctly. Keep practicing until you can get all the answer correct in less than an hour $\Theta$

Find the rate of change between days 1 and $2 \quad$ Find the slope from the graph. and between days 3 and 5 from the table.
Cost of Renting a Computer

| Number of Days | Rental Charge |
| :---: | :---: |
| 1 | $\$ 60$ |
| 2 | $\$ 75$ |
| 3 | $\$ 90$ |
| 4 | $\$ 105$ |
| 5 | $\$ 120$ |



Find the slope of the lines between the two points.
$C(2,5)$ and $D(4,7)$
$\mathrm{M}(\mathrm{a}, \mathrm{b})$ and $\mathrm{N}(\mathrm{c}, \mathrm{d})$

$$
\begin{aligned}
& P(-1,4) \text { and } Q(3,-2) \\
& A(-2,1) \text { and } B(5,7)
\end{aligned}
$$

Graph the following equations in slope-intercept form by graphing the y-intercept and the slope.

$$
\begin{array}{lccc}
y=-2 x+5 & y=\frac{3}{5} x-1 & y=-3 x-6 & y=-2 x-3 \\
y=-\frac{3}{4} x+2 & y=3 & y-3=1-2 x & y=2 x-5
\end{array}
$$

Graph the following equations in standard form by graphing the $x$ - and $y$-intercepts.

$$
\begin{array}{ccc}
4 x-9 y=-12 & 2 x+5 y=6 & 2 x+3 y=12 \\
x=-4 & y=5 & 3 x+4 y=8
\end{array}
$$

Graph the equation in point-slope form by graphing the point and the slope. (Practice more of these from your homework!) $y=-\frac{5}{2}(x+4)+3$


Write equations in point-slope form from the given information.
$m=-3$ point $(-1,7)$
$m=\frac{2}{5}$ point $(10,-8)$
points ( $-1,4$ ) and $(2,3)$
points $(2,5)$ and $(4,6)$

Write these equations in standard form.

$$
y=\frac{3}{4} x+2 \quad y=-\frac{2}{5} x+1 \quad y=\frac{2}{3} x+6
$$

Write these equations in slope-intercept form.

$$
y=-\frac{1}{3}(x-2)+3 \quad y=\frac{1}{2}(x-4)+6
$$

Write these equations in standard form.

$$
y=\frac{2}{3}(x+6)+3 \quad y=-\frac{1}{5}(x-2)+1
$$

Write these equations in slope-intercept form.

$$
y=-2(x+3)+5 \quad y=\frac{3}{4}(x+8)-1
$$

For the equations $-6 x+8 y=-24$ and $y=\frac{3}{4} x-7$ are the lines parallel?
Write equations for lines that are parallel to the given lines through the given points.

$$
y=3 x+9 \text { through }(2,-6) \quad y=\frac{5}{2} x-4 \text { through }(-2,3)
$$

Write equations for lines that are perpendicular to the given lines through the given points.

$$
y=\frac{3}{4} x+1 \text { through }(1,8) \quad y=-2 x+7 \text { through }(6,2)
$$

Graph the following absolute value graphs and identify the domain and range, end behavior, and the intervals of increase and decrease.


Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:

$$
y=-|x|+4
$$



Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:
$y=|x+4|$


Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:

$$
y=-|x-2|
$$



Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:
$y=|x-2|+3$


Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:

$$
y=-|x+1|+5
$$



Domain:
Range:
End Behavior:
Increasing interval:
Decreasing interval:

Write an equation for each translation of $y=|x|$.

Translated 9 units down

Translated 10 units right

Translated 13 units up

Translated 7 units left



