

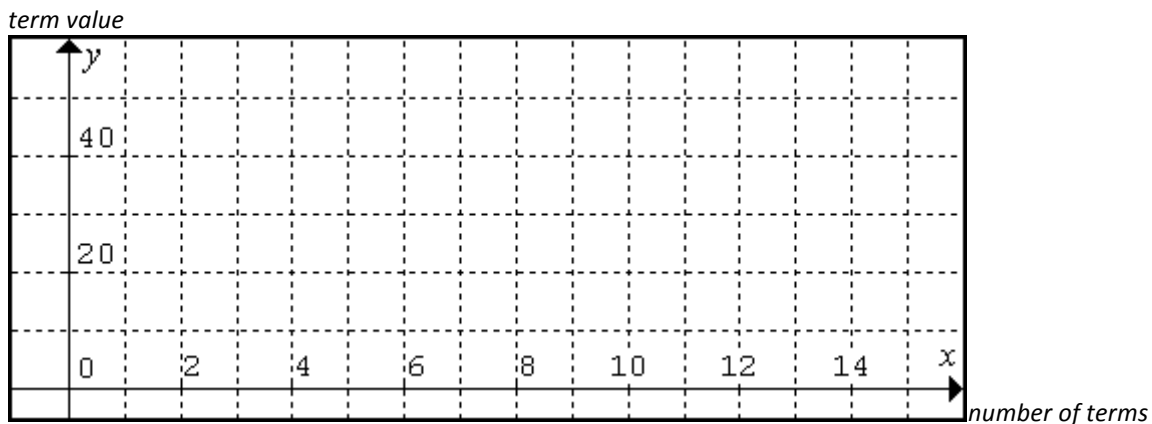
Strand: Algebra

Name: _____

Skill Addressed – Understanding Functions and their Graphs **Blk:** ____

Activity: *Part 6: Cartesian Coordinates – as the x changes, the graph changes height!*

Here is another grid: Graph $F(x) = 3x + 10$



Look on the grid to find the value of $F(10)$. _____

(This means: Find the output value when the function's input value is 10.)

Note also that you can calculate the value algebraically:

$$F(10) = 3(10) + 10 = 30 + 10 = \underline{\hspace{2cm}}$$

Circle this point (ordered pair) on the graph.

Notice that 40 is the height of the graph when $x = 10$.

Write this as an ordered pair (,)

These are called "Cartesian Coordinates" after René DesCartes who invented the coordinate axes for graphing ordered pairs.

Where is the origin? _____

Why do you think it is called the origin? _____

What would be the height of the function if the input value was -4 ? _____

Does this value make sense? _____

Does it depend on the context? Explain. _____
