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| Tables and Graphs: |
| 1. Fill in the missing spots in the table

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| --- | --- | --- | --- | --- | --- | --- | --- |
| X | 1 | 2 |  | 5 | 7 | 11 |  |
| y | 5 | 10 | 20 | 25 |  |  | 500 |

What equation relates x to y?1. Mrs. Watson gives out 8 pencils per day. Make a table to show the relationship between days and pencils:

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What equation relates the number of days *d* and the number of pencils *p* she has given out?1. Make a table for the equation *y=10x*

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| --- | --- | --- | --- | --- | --- | --- | --- |
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**Bonus: Make a graph on graph paper to match the equation and table.** |
| Substitution: |
| 1. Find the value of y when x=3 for the equation *y=3x + 10*
2. Evaluate the expression if x=3 and y = 6  *3x + 2y + 7*
3. Find the value of y when x = 10 for *x2 + 2x + 70*
 |
| Solving Equations: |
| Solve each equation:$1. x+3=10$ 2. $x-5=13$ 3. $5x=35$ 4. $\frac{x}{5}=3$$5. x+2.21=6.9$6. $2.21=x-7.11$ 7. $3.5x=7$ 8. $\frac{x}{1.5}=6$ |
| Simplifying Equations:  |
| Use the distributive property and combining alike terms to match the equivalent expressions:1. 3(x + 5) a) 2x + 7
2. x + x + 7 b) 3x + 8
3. 2(x + 7) c) x + x + 7 + 7
4. 3(x + 2) + 2 d) x + 2x + 15

Part 2: Create 3 equivalent expressions for each expression below:1. 3x + 10
2. x – 5
3. 8x + 12
 |
| Inequalities: |
| Write and graph an inequality for each situation below:1. You buy a bike that was more than $75.
2. Student council wants to spend less than $100 on the school dance.
3. You are selling bracelets for $5 each and want to make more than $55 total.

Part 2: Solve each inequality below and graph the solution.1. x + 3 > 10
2. 15 < x + 12
3. 5x > 20
4. $\frac{x}{3}<10$
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