Wednesday

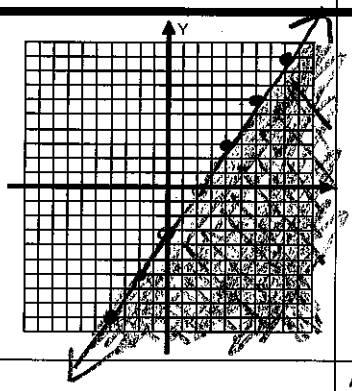
Graph the following inequality:

$3x - 2y \geq 6$ $-3x$

$-3x$

$\frac{-2y}{-2} \geq \frac{-3x+6}{-2}$

$y \leq \frac{3}{2}x - 3$



Write the explicit/closed rule for the sequence.

-3, 1, 5, 9, ...

Find the domain, range, and a_{120}. $a_{120} = 4(120) - 7$

$a_{120} = 473$

$a_1 = -3$ $d = 4$

D: {1, 2, 3, 4, ...} R: {-3, 1, 5, 9, ...}

$a_n = a_1 + d(n-1)$

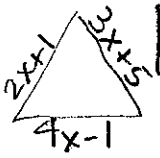
$a_n = -3 + 4(n-1)$

$a_n = -3 + 4n - 4$

$a_n = 4n - 7$

A triangle has 3 sides with lengths of (2x + 1), (3x + 5), and (4x – 1). Sketch and write a simplified algebraic expression for the **perimeter** of the triangle.

$P = 2x+1$



$P = 9x + 5$

$+3x+5+4x-1$

Given the sequence

7, 2, -3, -8, ...

$a_1 = 7$

$d = -5$

Write an explicit formula for the sequence. Use the formula to find a_{115}.

$a_n = 7 - 5(n-1)$

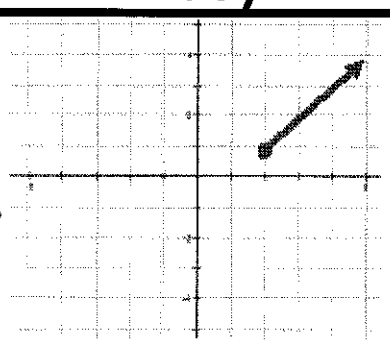
$a_n = 7 - 5n + 5$

$a_n = -5n + 12$

$a_{115} = -5(115) + 12$

$= -575 + 12 = -563$

Friday



Domain:

Range:

Int of Inc:

Int of Dec:

End Behavior:
As x → ____, f(x) → ____

A crane operator unloaded the following cargo:
- 5 pallets of lumber. Each pallet weighed 7.3 tons.
- 9 pallets of concrete. Each pallet weighed 4.8 tons.

Which load of cargo was heavier, the lumber or the concrete? How many pounds heavier?

Factor the expression.

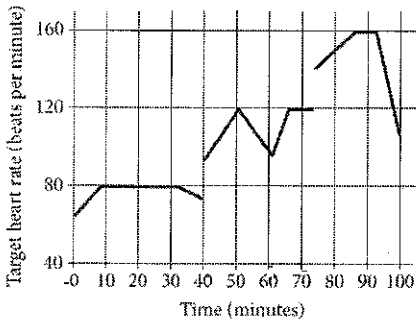
$-x + 6x^2 + 2x^3 - 3$

Solve the equation below for k.

$$W = \frac{4x - kx^2}{A}$$

SAT Question:

John runs at different speeds as part of his training program. The graph shows his target heart rate at different times during his workout. On which interval is the target heart rate strictly increasing then strictly decreasing?



A. Between 0 and 30 minutes
B. Between 40 and 60 minutes
C. Between 50 and 65 minutes
D. Between 70 and 90 minutes

SAT Question:

1 decagram = 10 grams
1,000 milligrams = 1 gram

A hospital stores one type of medicine in 2-decagram containers. Based on the information given in the box above, how many 1-milligram doses are there in one 2-decagram container?

A. 0.002
B. 200
C. 2,000
D. 20,000