Block: Algebra Daily 5 Week 7

Wednesday

Factor the following expression.

$8x^3 - 12x^2y - 14x + 21y$

$(2x-3y)(4x^2-7)$

$4x^2(2x-3y)-7(2x-3y)$

If the sum of 5 consecutive odd integers is greatest than 265, what are the smallest integers that would work?

$5x+20>265$

$-20 \quad -20$

$5x>245$

$x>49$

51, 53, 55, 57, 59

$x + x+2 + x+4 + x+6 + x+8 > 265$

odd

Juwaun decides to go to the Wheeler softball game. It is $3 to get in and then $1 per drink and $1.50 per Zaxby nibbler. If he buys d drinks and n nibblers, write an equation in function notation to represent how much he spent.

Then identify the coefficients and constants and describe what they mean in context.

$Cost = 3 + 1d + 1.50n$

Coef: 1, 1.50

Constant: 3

Katy has a playground at her school. The width of the playground is 10 ft less than triple the length, and the perimeter totals 236 ft. what are the dimensions of the playground?

$w = 3l - 10$

$l = 32$ ft. $w = 86$ ft.

$3l-10$ l $3l-10$

$2l + 2(3l-10) = 236$

$2l + 6l - 20 = 236$

$8l - 20 = 236$

$+20 \quad +20$

$8l = 256$

$l = 32$ ft

Katy is planting flowers around her playground. She wants to plant 5 tulips every 2 feet. A qt. of tulips has 8 tulips. A crate of tulips has 4 qts. If each crate costs $2.25, how much would Katy spend to purchase EXACTLY enough flowers for the playground? How much would she practically spend?

each crate: 32 tulips

$41.48

236 ft

$236 \div 2$

$118 \text{ ft} \times 5 = 590 \text{ tulips}$

$590 \div 32$

$19 \times 2.25 = \$42.75$

$\frac{236 \text{ ft}}{} \left| \frac{5 \text{ tulips}}{2 \text{ ft}} \right| \frac{1 \text{ qt}}{8 \text{ tulips}} \left| \frac{1 \text{ crate}}{4 \text{ qt}} \right| \frac{\$2.25}{1 \text{ crate}}$

But, you cannot buy part of a crate!

You need 390 tulips

$41.48

$\frac{390}{32} \approx 18$.... you need 19 crates = $42.75