

Sept. 5, 2012

## Chapter 2 Review Problems (2.1 - 2.4)

Consecutive Integers

$1, 2, 3, \dots$        $n$   
                                  $n+1$   
                                  $n+2$

Consecutive Odd Integers

$3, 5, 7, \dots$   
                                  $n$   
                                  $n+2$   
                                  $n+4$

Consecutive Even Integers

$2, 4, 6, \dots$   
                                  $n$   
                                  $n+2$   
                                  $n+4$

### Review

21) Find 4 consecutive integers such that twice the first subtracted from the sum of the other 3 is sixteen (16).

$n$		Sum of 3	- 2n = 16
$n+1$			
$n+2$			
$n+3$			
			$(n+1)+(n+2)+(n+3) - 2n = 16$
			$3n+6 - 2n = 16$

cont. #29

$$3n + 6 - 2n = 16$$

$$n + 6 = 16$$

$$\begin{array}{r} -6 \quad -6 \\ \hline \end{array}$$

$$\underline{n = 10}$$

$$n = 10$$

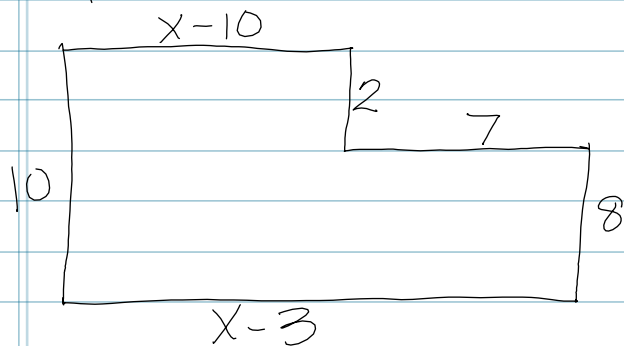
$$n + 1 = 11$$

$$n + 2 = 12$$

$$n + 3 = 13$$

p. 64 #9 Sec. 2.2

Perimeter



$$(x-3) - (x-10)$$

$$\begin{array}{r} x-3-x+10 \\ \hline 7 \end{array}$$

$$+ 27 = (10+2+7+8)$$

$$- 13 = (x-3)(x-0)$$

$$\underline{2x + 14}$$

$$x-10 + 2 + 7 + 8 + x-3 + 10 = \underline{2x + 14}$$

9/5/2012

CONT.

$$4 - (-7) + 3 - 8 + 4 - (+3)$$

$$4 + 7 + 3 - 8 + 4 - 3 = 7$$

$$\begin{array}{r} \text{pos.} \quad 4 + 7 + 3 + 4 = 18 \\ \text{neg.} \quad -8 + -3 = -11 \\ \hline 7 \end{array}$$

---

EXAMPLE

$$\frac{2}{3}(x-1) \leq \frac{3}{4}(x+2) \quad \text{lcd} = 12$$

$$\frac{4}{1} \cdot \frac{2}{3}(x-1) \leq \frac{3}{1} \cdot \frac{3}{4}x + 2 \cdot 12 \quad 2 \cdot 3 \cdot 4$$

$$8(x-1) \leq 9x + 24$$

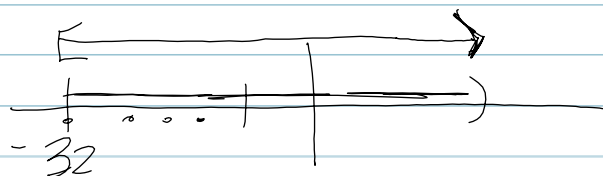
$$8x - 8 \leq 9x + 24$$

$$\begin{array}{r} -9x \quad -9x \\ \hline -x - 8 \leq 24 \end{array}$$

$$\begin{array}{r} +8 \quad +8 \\ \hline -x \leq 32 \end{array}$$

$$\frac{-x}{-1} \leq \frac{32}{-1}$$

$$x \geq -32$$



$$[-32, \infty)$$

CONT.

$$< \text{ or } > \quad 0 \quad ($$

$$\leq \text{ or } \geq \quad \bullet \quad [$$

$$\infty \text{ or } -\infty \quad ($$

$$\text{lcd } \frac{2}{3} (x-1) \leq \frac{3}{4} x + 2$$

$$\boxed{\frac{2}{4} = \frac{9}{12}}$$

$$* 8(x-1) \leq 9x + 24$$

---

$$\text{lcd } \frac{2}{3} x - \frac{2}{3} \leq \frac{3}{4} x + \frac{2}{1}$$

$$8x - 8 \leq 9x + 24$$