Bellwork Hon Alg 2 Tuesday, March 21, 2017

1. Alice had to read 350 pages of a book over the weekend. If on Sunday, she read 50 pages more than half the amount she read on Saturday, how many pages did she read on Saturday?

A. 150
B. 175
C. 200
D. 225
E. 250

2. If $xy < 0$, which of the following must be true?

I. $x + y = 0$
II. $2y - 2x < 0$
III. $x^2 + y^2 > 0$

A. I only
B. III only
C. I and III
D. II and III
E. I, II, and III

3. Allie has three fewer than twice the number of coins that Jonathan has. If Jonathan gave 2 coins to Allie, she would have three times as many coins as he would. How many coins does Allie have?

A. 2
B. 3
C. 5
D. 7
E. 9

4. If $2t + \frac{(s-r)}{3} = r$, what is s in terms of r and t?

A. $2r - 3t$
B. $2(r - 3t)$
C. $2(2r - 3t)$
D. $2(2r + 3t)$
E. $3(2r - t)$

5. Alan, Fred, and Mark are going to buy a computer that costs $\$540$. If Alan pays $\$40$ more than Fred and Fred pays twice as much as Mark, then how much does Mark pay?

A. $\$100$
B. $\$140$
C. $\$160$
D. $\$200$
E. $\$240$

Hon Alg 2 Bellwork ANSWERS

THE 3-21-17

(1) SAT: (X) SUN: $\left(\frac{1}{2}X + 50\right)$

$$X + \frac{1}{2}X + 50 = 350$$

$$\frac{3}{2}X + 50 = 350$$

$$\frac{2}{3} \cdot \frac{3}{2}X = 300 \cdot \frac{2}{3}$$

$$X = 200$$

C

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(2) if $xy < 0$ x & y have opposite signs but you don't know which one is pos and which one is neg.

I. may be true but you don't know x & y are opposites

II. may be true if y is neg but you don't know this

III. must be true because x^2 & y^2 will be pos.

B

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(3) NOW: $A = 2J - 3$

AFTER: $A + 2 = 3(J - 2)$

$$A + 2 = 3J - 6$$

$$A = 3J - 8$$

$$2J - 3 = 3J - 8$$

$-2J$ $+8$ $\quad$ $-2J$ $+8$

$$5 = J$$

$$A = 2(5) - 3$$

$$A = 10 - 3$$

$$A = 7$$

D

(4)

$$\underset{-2t}{2t} + \frac{s-r}{3} = r \underset{-2t}{}$$

$$3 \cdot \frac{s-r}{3} = (r-2t)3$$

$$s - r = 3r - 6t$$
$$+r \quad +r$$

$$s = 4r - 6t = 2(2r-3t)$$

C

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(5)

$$A + F + M = 540$$

$$A = F + 40$$

$$F = 2M$$

$$(F+40) + (2M) + M = 540$$

$$2M + 40 + 2M + M = 540$$

$$5M + 40 = 540$$
$$-40 \quad -40$$

$$5M = 500 \rightarrow M = 100$$

A