JOHN BAYLOR TEST PREP

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ACT PREPARATION SINCE 1994

Session #7 Quiz B (1 of 3)

10 Minutes—10 Questions

USE THIS AREA FOR FIGURING.

1. Solve for a in terms of b for the given equation:
$7a + 3b - 2a = b + a$

A. $-\frac{1}{2}b$

B. $\frac{1}{2}b$

C. $\frac{3}{2}b$

D. $-\frac{3}{2}b$

E. $2b$

2. A pet store stocks goldfish, neon tetra fish, and black molly fish in a ratio of 5:4:3. If the store currently has a total of 480 fish, how many more goldfish than neon tetra fish do they have?

F. 40
G. 60
H. 80
J. 120
K. 200

3. A class observed the number of butterflies that visited milkweed and bee balm plants in the school butterfly garden during lunch each day for five days. The following chart represents their observations. (Note: "R" stands for Thursday)

	M	T	W	R	F
Milkweed	7	5	8	8	2
Bee Balm	7	3	2	2	6

What is the mean number of butterflies that visited the milkweed plants?

A. 5
B. 6
C. 6.5
D. 7
E. 8

Session #7 Quiz B (2 of 3)

10 Minutes—10 Questions

USE THIS AREA FOR FIGURING

4. What is the sum of the measures of the angles in an octagon?
   - **F.** 108°
   - **G.** 360°
   - **H.** 720°
   - **J.** 1020°
   - **K.** 1080°

5. What is the equation of a circle with a midpoint at (-1,2) and a diameter of 6?
   - **A.** $(x-1)^2 + (y-2)^2 = 9$
   - **B.** $(x-1)^2 + (y+2)^2 = 3$
   - **C.** $(x+1)^2 + (y-2)^2 = 9$
   - **D.** $(x+1)^2 + (y-2)^2 = 3$
   - **E.** $(x+1)^2 + (y+2)^2 = 3$

6. Linnea budgets $20.00 a week (Monday through Friday) for breakfast. If she spends $4.15 on Monday morning, spends $2.95 on Tuesday morning, and averages $4.10 for Wednesday and Thursday mornings, how much is left for her Friday breakfast?
   - **F.** $0.60
   - **G.** $4.40
   - **H.** $4.70
   - **J.** $4.80
   - **K.** $8.80

7. Simplify: $(3a - 2b)(2a + 4b)$
   - **A.** $6a^2+12ab-8b^2$
   - **B.** $6a^2- 8ab-8b^2$
   - **C.** $6a - 4ab-8b^2$
   - **D.** $6a^2+8ab-8b^2$
   - **E.** $6a^2+8ab+8b^2$

Session #7 Quiz B (3 of 3)

10 Minutes—10 Questions

USE THIS AREA FOR FIGURING.

8. What is the midpoint of a line segment with endpoints of (-2,0) and (1,-1)?

F. (-1,1)

G. (1,-1)

H. $(-\frac{1}{4},-\frac{1}{2})$

J. $(-\frac{1}{2},-2)$

K. $(-\frac{1}{2},-\frac{1}{2})$

9. Which of the following is the solution set for $x^2 + 4x - 32 = 0$?

A. -1, 32

B. -2, 16

C. 2, -16

D. 4, 8

E. 4, -8

10. Solve for x in terms of y for the given equation:

$3(4x+3y) = 12$

F. $6y - \frac{2}{3}$

G. $1 - \frac{3}{4}y$

H. $12 - \frac{3}{4}y$

I. $2 - \frac{1}{2}y$

J. $1 + \frac{3}{4}y$