

CHAPTER

8

Quiz

Lessons 8-6 Through 8-8

Select the best answer.

1. What is the sum of all the solutions of the equation $\frac{4}{x} + \frac{4}{2x+3} = 9$?

A $-\frac{5}{6}$

B $\frac{1}{3}$

C $\frac{11}{6}$

2. A pool has three drains. The largest can drain the pool in 6 hours, the smallest can drain the pool in 12 hours. The other can drain the pool in 8 hours. How long will it take to drain the pool if all three drains are open?

F 2 hours and 20 minutes

G 2 hours and 40 minutes

H 3 hours

3. Which expression is equal to

$$\frac{(\sqrt{xy})(\sqrt[4]{x^2y})}{xy}?$$

A $y^{-\frac{1}{4}}$

B $x^{\frac{1}{4}}y^{-\frac{1}{4}}$

C $x^{\frac{3}{4}}y^{-\frac{1}{4}}$

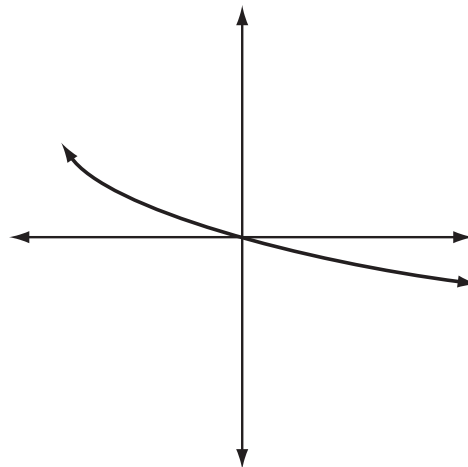
4. Which of the following is equal to an integer?

F $\frac{\sqrt[3]{32}\sqrt[6]{4}}{\sqrt{2}}$

G $\frac{\sqrt{8}\sqrt[3]{16}}{\sqrt[6]{2}}$

H $\frac{\sqrt{2}\sqrt[3]{4}}{\sqrt[6]{2}}$

5. Which of the following could be the equation for the graph?



A $f(x) = -\sqrt{x+2} + 1$

B $f(x) = \sqrt{2-x} + 1$

C $f(x) = -\sqrt{x+4} + 2$

6. Solve $\sqrt{36x-9} = 3\sqrt{4x-2}$.

F 0.125

G all real numbers

H no solution

7. Which of the following is an extraneous solution to $\sqrt{5x+1} = 2x-2$?

A $x = \frac{1}{4}$

B $x = 3$

C There is no extraneous solution.

8. What is the solution set to the equation $3x - 5 = (6x + 5)^{\frac{1}{2}}$?

F $\left\{\frac{2}{3}\right\}$

G $\left\{\frac{10}{3}\right\}$

H no solution

CHAPTER 8

Section Quiz Lessons 8-6 Through 8-8

- | | |
|------|------|
| 1. A | 5. C |
| 2. G | 6. H |
| 3. A | 7. A |
| 4. H | 8. G |