

Problems of the Week # 11

Name: _____

Date: _____

Circle the one best answer. Justify your answer by showing all work below.

51. Simplify this expression: $25^{\frac{1}{2}} - 3^2 \div 3^{-1}$

- A. -22 B. -12 C. $-\frac{4}{3}$ D. $\frac{7}{6}$ E. 2

52. Find the equation of the line that passes through points (2,3) and (-4,5).

- A. $y - 5 = -\frac{1}{3}(x - 2)$ B. $y - 5 = -\frac{1}{3}(x + 4)$ C. $y - 5 = 3(x + 4)$
D. $y = -\frac{1}{3}x + 5$ E. $y = -\frac{1}{3}x + \frac{7}{3}$

53. If $g(x) = x^2 - 6$, then $g(c) + g(2) =$

- A. $c^2 + 4c - 2$ B. $c^2 + 4$ C. $c^2 - 8$ D. $c^2 + 4c + 4$ E. $c^2 - 4$

54. Solve this equation for x : $-0.43 = 2.7 - 5x$. Round the answer to the nearest hundredth.

- A. -0.45 B. 15.65 C. 0.45 D. -0.63 E. 0.63

55. A tire has a circumference of 36 inches. Approximately how many revolutions does the tire make when the tire rolls 1 mile (5,280 ft)?

- A. 147 B. 440 C. 1,760 D. $1,760\pi$ E. 15,840