AUC PreCalculus

Assignment 11.

The deadline for all homework assignments is the one specified in Archie before 11:59 pm. As discussed in class, It must be correctly uploaded in order to be graded. Show all your work and justifications.

For Exercises 99–116 (Odd), simplify the expression.

99. $\dfrac{2x^3y}{x^2y + 3xy} \cdot \dfrac{x^2 + 6x + 9}{2x + 6} \div 5xy^4$ $\quad \dfrac{x}{5y^4}$

101. $\left(\dfrac{4}{2t + 1} - \dfrac{t}{2t^2 + 17t + 8}\right)(t + 8)$ $\quad \dfrac{3t + 32}{2t + 1}$

103. $\dfrac{n - 2}{n - 4} + \dfrac{2n^2 - 15n + 12}{n^2 - 16} - \dfrac{2n - 5}{n + 4}$ $\quad 1$

105. $\dfrac{1 - a^{-1} - 6a^{-2}}{1 - 4a^{-1} + 3a^{-2}}$ $\quad \dfrac{a + 2}{a - 1}$

107. $\dfrac{34}{2\sqrt{5} - \sqrt{3}}$ $\quad 4\sqrt{5} + 2\sqrt{3}$

109. $\dfrac{8 - \sqrt{48}}{6}$ $\quad \dfrac{4 - 2\sqrt{3}}{3}$

111. $\dfrac{14}{\sqrt{7x}} - \dfrac{\sqrt{7x}}{x}$ $\quad \dfrac{\sqrt{7x}}{x}$

113. $\dfrac{45 + 9x - 5x^2 - x^3}{x^3 - 3x^2 - 25x + 75}$ $\quad -\dfrac{x + 3}{x - 5}$

115. $\dfrac{\dfrac{t + 6}{1 + \dfrac{2}{t}} - t - 4}{}$ $\quad -\dfrac{8}{t + 2}$