

Problems of the Week # 7

Name: _____

Date: _____

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

31. If the zeros of a quadratic function are -1 and 3 , one possible function containing these zeros is:

A. $f(x) = x^2 + 2x - 3$ B. $f(x) = x^3 - 2x^2 - 3x$ C. $f(x) = 2x^2 + 4x - 6$

D. $f(x) = x^2 - 2x + 3$ E. $f(x) = 2x^2 - 4x - 6$

32. Solve for p : $A = \frac{12M}{p+3pr}$

A. $\frac{12M-3pAr}{A}$ B. $\frac{4M}{Ar}$ C. $\frac{4M}{A+Ar}$ D. $\frac{12M}{A+3Ar}$ E. $\frac{12M}{4Ar}$

33. Multiply: $\left(x + \frac{1}{3}\right)\left(x - \frac{1}{3}\right)$

A. $x^2 - 9$ B. $x^2 - \frac{1}{9}$ C. $x^2 + 9x - 9$ D. $9x^2 - 1$ E. $x^2 - \frac{2}{3}x - \frac{1}{9}$

34. Solve this absolute value equation: $|8m - 3| + 1 = 14$

A. 2 B. $2, -\frac{3}{2}$ C. $2, -2$ D. $2, -\frac{5}{4}$ E. $\frac{5}{4}$

35. A wheel has a circumference of 45 inches. Approximately how many revolutions does the wheel make when it rolls 1 mile (5,280 feet)?

A. 78π B. 448 C. 117 D. 1,028 E. 1,408

Problems of the Week # 7