POLYNOMIAL EQUATIONS – ANSWER KEY

(01). $x = 5 \; or \; x = -2 + \sqrt{3} \; or \; x = -2 - \sqrt{3}$

(02). $p = 2 \; or \; p = -1 + \sqrt{2} \; or \; p = -1 - \sqrt{2}$

(03). $q = (-3) \; or \; q = -\frac{1}{2} + \frac{\sqrt{3}}{2} \; or \; q = -\frac{1}{2} - \frac{\sqrt{3}}{2}$

(04). $x = 9 \; or \; x = \frac{5}{6} + \frac{\sqrt{13}}{6} \; or \; or \; x = \frac{5}{6} - \frac{\sqrt{13}}{6}$

(05). $p = 1 \; or \; p = 4 \; or \; p = \left(-\frac{1}{2}\right)$

(06). $q = 8 \; or \; q = \frac{1}{4} + \frac{\sqrt{41}}{4} \; or \; q = \frac{1}{4} - \frac{\sqrt{41}}{4}$

(07). $m = 2 \; or \; m = 2 + \sqrt{2} \; or \; m = 2 - \sqrt{2}$

(08). $t = 1 \; or \; t = (-1) \; or \; t = 2\frac{1}{3}$

(09). $n = 7 \; or \; n = 2 + \sqrt{11} \; or \; n = 2 - \sqrt{11}$

(10). $q = 5 \; or \; q = \frac{6}{5} + \frac{\sqrt{41}}{5} \; or \; q = \frac{6}{5} - \frac{\sqrt{41}}{5}$

(11). $q = 3\frac{1}{2} \; or \; q = \frac{3}{2} + \frac{\sqrt{13}}{2} \; or \; q = \frac{3}{2} - \frac{\sqrt{13}}{2}$

(12). $m = \frac{1}{3} \; or \; m = \frac{3}{2} + \frac{\sqrt{19}}{2} \; or \; m = \frac{3}{2} - \frac{\sqrt{19}}{2}$

(13). $t = 1\frac{2}{5} \; or \; t = 1 + \sqrt{7} \; or \; t = 1 - \sqrt{7}$

(14). $m = \left(-\frac{2}{11}\right) \; or \; m = 1 \; or \; m = \frac{1}{2}$

(15). $n = 4\frac{1}{3} \; or \; n = \frac{9}{8} + \frac{\sqrt{97}}{8} \; or \; n = \frac{9}{8} - \frac{\sqrt{97}}{8}$

(16). $u = 5\frac{1}{2} \; or \; u = 2 \; or \; u = 4$