

Quiz 33.2

Solve each equation with the quadratic formula.

1) $4x^2 + 7x - 15 = 0$

A) $\left\{ \frac{-7 + \sqrt{109}}{8}, \frac{-7 - \sqrt{109}}{8} \right\}$

B) $\left\{ \frac{-3 + \sqrt{73}}{6}, \frac{-3 - \sqrt{73}}{6} \right\}$

C) No solution.

D) $\left\{ \frac{5}{4}, -3 \right\}$

2) $8n^2 + 3n = 1$

A) $\left\{ \frac{3 + \sqrt{41}}{16}, \frac{3 - \sqrt{41}}{16} \right\}$

B) $\left\{ \frac{-3 + \sqrt{41}}{16}, \frac{-3 - \sqrt{41}}{16} \right\}$

C) $\left\{ \frac{-5 + \sqrt{465}}{22}, \frac{-5 - \sqrt{465}}{22} \right\}$

D) $\{5, -4\}$

Divide.

3) $\frac{36m^4 + 4m^3 + m^2}{9m^2}$

A) $m^7 + \frac{m^6}{8} + \frac{3m^5}{8}$

B) $m + \frac{3}{4} + \frac{1}{m}$

C) $4m^2 + \frac{4m}{9} + \frac{1}{9}$

D) $\frac{1}{4} + \frac{1}{4m} + \frac{5}{8m^2}$

Factor the common factor out of each expression.

4) $32p^6 - 16p^3 + 4p^2$

A) $4p^2(8p^4 - 4p + 1)$

B) $4p^2(16p^5 - 8p^2 + 2p)$

C) $4p^2(32p^5 - 16p^3 + 4p)$

D) $4p(8p^4 - 4p + 2)$