

Homework 33.2**Solve each equation with the quadratic formula.**

1) $3n^2 + 11n - 42 = 0$

2) $5a^2 - 7a - 4 = 0$

3) $7x^2 + 11x = 20$

4) $7n^2 + 5n = 9$

Divide.

5) $(2x^4 + 18x^3 + 18x^2) \div 6x^3$

6) $(20x^5 + 4x^4 + 8x^3) \div 4x^2$

Factor the common factor out of each expression.

7) $-70n^5 + 63n - 63$

8) $6x^4 - 2x^3 - 3x^2$

Answers to Homework 33.2

1) $\left\{2 \frac{1}{3}, -6\right\}$

2) $\left\{\frac{7 + \sqrt{129}}{10}, \frac{7 - \sqrt{129}}{10}\right\}$

3) $\left\{\frac{-11 + \sqrt{681}}{14}, \frac{-11 - \sqrt{681}}{14}\right\}$

4) $\left\{\frac{-5 + \sqrt{277}}{14}, \frac{-5 - \sqrt{277}}{14}\right\}$

5) $\frac{x}{3} + 3 + \frac{3}{x}$

6) $5x^3 + x^2 + 2x$

7) $7(-10n^5 + 9n - 9)$

8) $x^2(6x^2 - 2x - 3)$