

## Common Core Benchmark Review

Factor

①  $3x^3 + 9x$

②  $x^2 + 11x + 30$

③  $16x^2 - 9y^2$

④  $2x^2 + 15x + 7$

Solve by factoring

⑤  $2x^2 + 8x = 0$

⑥  $36x^2 - 81 = 0$

⑦  $x^2 + 7x - 8 = 0$

Solve using the quadratic formula

$$\left( x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \right)$$

⑧  $x^2 + 4x - 3 = 0$

⑨  $2x^2 + 3x - 20 = 0$

Multiply and simplify (if possible)

⑩  $\sqrt{3x} \sqrt{3x^2}$

⑪  $\sqrt{3x} \sqrt{x+z}$