

DRILL (Factor)

GCF:

① $4x^3y^4 + 12x^2y^3 + 20x^3y^5$

* $4x^2y^3(xy + 3 + 5xy^2)$

② Grouping:

$4x^2 + 8x + 3xy + 6y$

$4x(x+2) + 3y(x+2) = (x+2)(4x+3y)$

③ Trinomial:

$2x^2 + 11x + 5$

$ac = 10$

$x^2 + 11x + 10$

$(x+1)(x+10) = (2x+1)(x+5) *$

$$\begin{aligned}
 & \downarrow 6x^2 + 13x + 6 \downarrow \\
 & \underline{6x^2 + 9x} + \underline{4x + 6} \\
 & = 3x(2x + 3) + 2(2x + 3) \\
 & = \underline{(2x + 3)} \underline{(3x + 2)}
 \end{aligned}$$

→ $ac = 36$

$$\begin{aligned}
 & x^2 + 13x + 36 \\
 & (x + \frac{4}{6})(x + \frac{9}{6}) \\
 & (x + \frac{2}{3})(x + \frac{3}{2}) \\
 & \underline{(3x + 2)} \underline{(2x + 3)}
 \end{aligned}$$



$$8x^2 - 22x + 5$$

\swarrow \searrow
 $8x^2 - 2x$ $-20x + 5$

$$2x(4x-1) - 5(4x-1)$$

$$(4x-1)(2x-5)$$

AC = 40
 MULT
 ADDS
 -22

-2
 -20