

$$\begin{array}{c}
 28 \\
 \wedge \\
 7 \cdot 4 \\
 \quad \wedge \\
 \quad 2 \cdot 2
 \end{array}$$

$$2^2 \cdot 7$$

$$7 \cdot 2 \cdot 2$$

$$\begin{aligned}
 x^4 - 16 &= (x^2 + 4)(x^2 - 4) \\
 &= (x^2 + 4)(x + 2)(x - 2)
 \end{aligned}$$

$$(x + 3)(x + 3) = (x + 3)^2$$

$$1. \frac{15x^2y^3z^5}{5xy^2z^2} - \frac{75xy^2z^3}{5xy^2z^2} + \frac{45x^2y^2z^2}{5xy^2z^2}$$

$$3. \frac{5xy^2z^2}{15xy^2z^2} \left( \frac{3xy^2z^3}{3} - \frac{15z}{3} + \frac{9x}{3} \right)$$

$$15xy^2z^2(xy^2z^3 - 5z + 3x)$$

$$2. x^2 - 121 = (x+11)(x-11)$$

$$3. x^2 - 22x + 121 = (x-11)^2$$

① GCF 28  
② PS 7^4  
28 = 7^2 \* 4 = 2^2 \* 7 = (2^2 \* 7)

$$4. x^2 - 7x + 49$$

not factorable  
a (x-7)^2 + 2ab  
2 \* x \* (-7) = -14x

$$6. 81a^4 - b^4$$

$$5. x^4 - 16 = (9a^2 + b^2)(9a^2 - b^2)$$

$$(9a^2 + b^2)(3a + b)(3a - b)$$

$a^2 - b^2 = (a+b)(a-b)$

$$(x^2 + 4)(x^2 - 4)$$

$$(x^2 + 4)(x+2)(x-2)$$

28 = 7 \* 4 = 7 \* 2 \* 2

$$(x + \dots) (-6)$$

$$x^2 - 5x + 6$$

$$x^2 - 5x - 6$$