

DIRECTIONS: Simplify.

$$\text{Example 1: } \frac{5x^2-15x}{10x^2}$$

$$\text{Example 2: } \frac{m^2-m-2}{m^2+m}$$

$$\text{Example 3: } \frac{w^2-5w+6}{w^2-7w+12}$$

$$\text{Example 4: } (r^2 - 5r + 4)(r - 4)^{-2}$$

$$\text{Example 5: } \frac{x^2+2x-8}{(2-x)(4+x)}$$

$$1. \frac{3t^4-9t^3}{6t^2} \quad \frac{t(t-3)}{2}$$

$$2. \frac{z^3-4z}{z^2-4z+4} \quad \frac{z(z+2)}{z-2}$$

$$3. (p^2 - pb)(p^2 - b^2)^{-1} \\ \frac{p}{p+b}$$

$$4. \frac{(a-x)^2}{x^2-a^2} \quad \frac{(x-a)}{(x+a)}$$

$$5. \frac{2t^2+5t-3}{2t^2+7t+3} \quad \frac{2t-1}{2t+1}$$

$$6. \frac{9-4z^2}{6z^2-5z-6} \quad -\frac{2z+3}{3x+2}$$

$$7. (p^2 + 4p - 5)(p - 1)^{-2} \\ \frac{p+5}{p-1}$$

$$8. \frac{(t+1)(t^2-1)}{(t-1)(t+1)^2} \quad 1$$

$$9. (1 - r^3)(1 - r)^{-3} \\ \frac{1+r+r^2}{(1-r)^2}$$

$$10. \frac{t^4-c^4}{(t+c)^2(t^2+c^2)} \\ \frac{t-c}{t+c}$$