

SIMPLIFY:

$$1. (-3x^6 + 3x^4 - x^2) - (-x^6 + 2x^4 + 2x^2)$$

$$2. (x-2)(x^2 - 4x + 3)$$

$$3. (xy + ab^2)(xy - ab^2)$$

$$4. \frac{25x^8 - 50x^7 + 3x^6 - 40x^5}{-5x^5}$$

$$5. \frac{x^2 - 6x + 8}{x-3}$$

$$6. \frac{45x^4}{15x^{12}}$$

FOR:

$$7. x^2 - 8x + 15$$

$$8. 64x^2 - 16x + 1$$

$$9. x^9 - x^5$$

10.

$$x^2 = 8x$$

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11.

$$25x^2 - 80x + 64 = 0$$

12.

$$8x^2 - 22x + 5 = 0$$

SIMPLIFY:

13.

$$\frac{x^2 + 5x + 4}{x^2 - 4x - 5}$$

14.

$$\frac{x-1}{x^2+2x+1} \cdot \frac{x^2-1}{(x-1)^2}$$

15.

$$\frac{x^2-2x}{15} \div \frac{x-2}{5}$$

16.

$$\frac{4-x}{2x-4} - \frac{3x-8}{4-2x}$$

17.

$$\frac{x}{x-5} - \frac{x-5}{x}$$

18.

$$\frac{\frac{1}{9} - \frac{1}{x}}{\frac{9-x}{9}}$$

SOLVE

19.

$$\frac{12}{x^2-4} - \frac{3}{x-2} = \frac{5}{x+2}$$

SIMPLIFY

20.

$$4\sqrt{12x} - 2\sqrt{75x}$$