ACTION

RESPONSE

Simplify the following algebraic expressions:



1.
$$\frac{12x - 4}{36x + 4}$$

$$4. \frac{4a + 8b}{a^2 + 2ab}$$

$$7. \frac{4b^2}{2ab - 8b^2}$$

$$2. \frac{5x + 15}{7x + 21}$$

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

2.
$$\frac{5x + 15}{7x + 21}$$
 5. $\frac{3x - x^2}{x^2}$ 8. $\frac{3ab}{a^2b - ab^2}$

3.
$$4x + 2$$
 $14x + 7$

3.
$$\frac{4x + 2}{14x + 7}$$
 6. $\frac{x}{x^2 - 2x}$

$$9. \frac{10x^2 - 20x}{5x^2 + 10x}$$

Reasoning

Prove that:
$$\frac{x^2 - 9}{4x + 12}$$

Is equal to:
$$\frac{x-3}{4}$$

Problem Solving

The area of the rectangle below is $x^2 + 7x + 10$. What is the height in terms of x?



$$3x + 6$$

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