

HW Review

$$(3a + 1)(2a + 5) - (a + 1)^2$$

$$6a^2 + 15a + 2a + 5 - [(a + 1)(a + 1)]$$

$$6a^2 + 17a + 5 - [a^2 + a + a + 1]$$

$$6a^2 + 17a + 5 - [a^2 + 2a + 1]$$

$$\underline{6a^2} + \underline{17a} + \underline{5} - \underline{a^2} - \underline{2a} - \underline{1}$$

$$5a^2 + 15a + 4$$

$$(x+1)(x+2)(x+3) *$$

$$(x+1)(x^2 + 3x + 2x + 6)$$

$$(x+1)(x^2 + 5x + 6)$$

$$\begin{array}{l} \downarrow \\ x(x^2 + 5x + 6) + 1(x^2 + 5x + 6) \end{array}$$

$$x^3 + 5x^2 + 6x + x^2 + 5x + 6$$

$$x^3 + 6x^2 + 11x + 6$$

Work with polynomials.... *

Find an expression for the perimeter and area (simplify)



$$l = 3x - 2$$

$$P = 2l + 2w$$

$$P = 2(3x - 2) + 2(2x + 1)$$

$$P = 6x - 4 + 4x + 2$$

$$P = 10x - 2$$

$$A = l \cdot w$$
$$A = (3x - 2)(2x + 1)$$
$$A = 6x^2 + 3x - 4x - 2$$
$$A = 6x^2 - x - 2$$

Find an expression for the shaded area

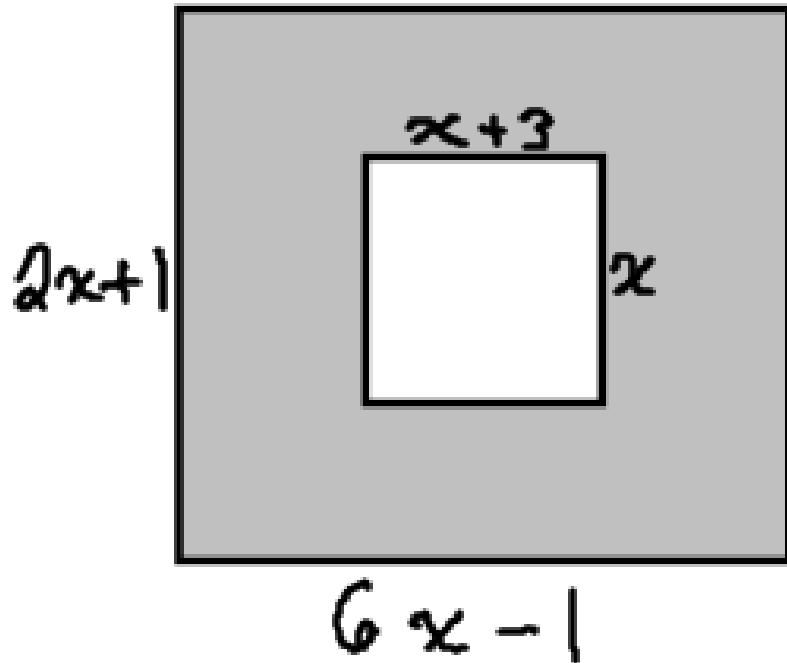
$$A_{\text{SHADED}} = A_{\text{BIG}} - A_{\text{SMALL}}$$

$$= (2x+1)(6x-1) - (x)(x+3)$$

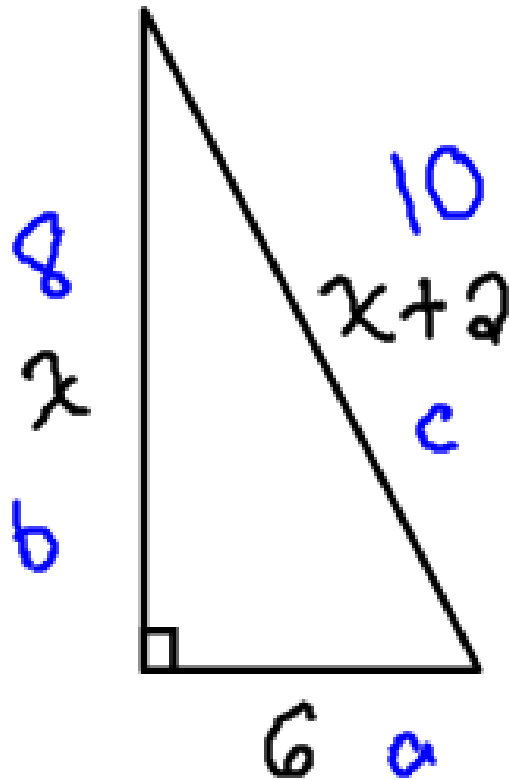
$$= 12x^2 - 2x + 6x - 1 - [x^2 + 3x]$$

$$= 12x^2 + 4x - 1 - x^2 - 3x$$

$$= 11x^2 + x - 1$$



Solve for 'x' given:



Pythagorean Theorem

$$c^2 = a^2 + b^2$$

$$(x+2)^2 = 6^2 + x^2$$

$$(x+2)(x+2) = 36 + x^2$$

$$x^2 + 2x + 2x + 4 = 36 + x^2$$

$$\cancel{x^2} + 4x + 4 = 36 + \cancel{x^2}$$

$$4x + 4 = 36$$

$$\frac{4x}{4} = \frac{32}{4}$$

$$\boxed{x = 8}$$

~~Do p. 186-187 - #15, 18, 20~~

finish

Small factoring.
Sheet