

Feb. 15, 2018

Warmup

$$a) -2 + (3 - \underline{4 \times 2})^2 \times (4 - 2)$$

$$= -2 + (\underline{3 - 8})^2 \times (\underline{4 - 2})$$

$$= -2 + (-5)^2 \times 2$$

$$= -2 + 25 \times 2$$

$$= -2 + 50$$

$$= \boxed{48}$$

$$b) \frac{1}{2} + \frac{1}{3} \times \frac{1}{4}$$

$$= \frac{1}{2} + \frac{1}{12}$$

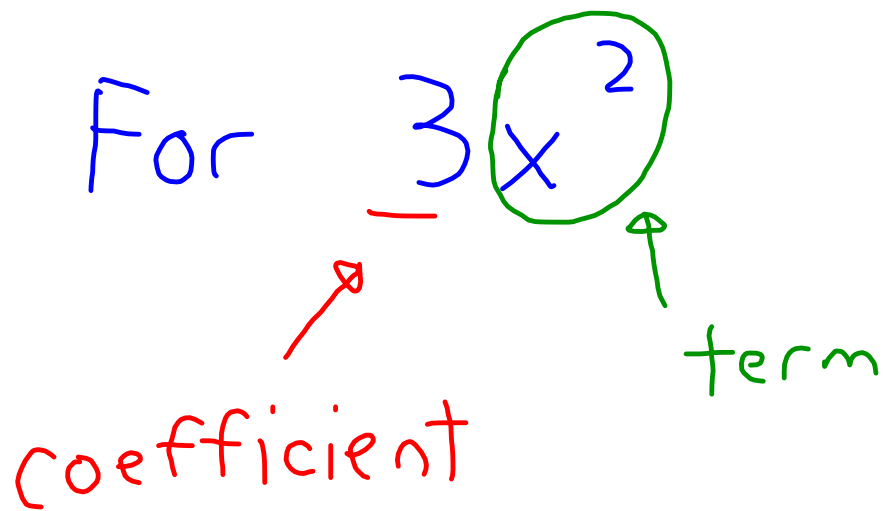
$$\left(= \frac{6}{12} + \frac{1}{12} \right) \times 1$$

$$= \boxed{\frac{7}{12}}$$

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Polynomials

For $3x^2$



coefficient

term

If two terms have the same base and exponent, you can add and subtract coefficients.

Ex. 1

$$a) 1x + 1x$$

$$= \boxed{2x}$$

$$b) 5x + 3x$$

$$= \boxed{8x}$$

$$c) 4x - 3x$$

$$= \boxed{1x}$$

d) $5x + 3y + x - 4y + 8 -$
collect like terms
(bring like things to

$$= \underline{5x - 2x + x} + \underline{3y - 4y + 8}$$
$$= \boxed{4x + 2y + 8}$$

e) $4w + 3x - 2y + 8w$

$$= \underline{4w + 8w} + \underline{3x - 3x}$$

$$= \boxed{12w + 0x + 2y + 18a + 20}$$

$$2x + 3y + 5$$

get her 1

$$3y + 8 + 5$$

$$-3x + 4y + 18a + 20$$

$$-2y + 4y + 18a + 20$$

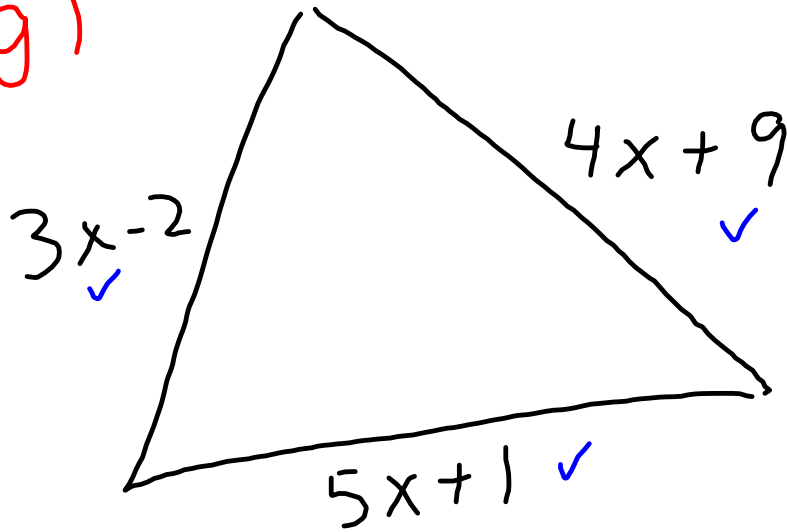
$$f) \quad 3x^2 + 4x - 2 - 2x^2 - 5x + 8$$

$$\otimes \quad = 4x - 5x + \underbrace{3x^2 - 2x^2} - 2 + 8$$

$x^2 \rightarrow x \rightarrow \text{number}$

$$= \boxed{1x^2 - x + 6}$$

g)



i) Find the perimeter of the triangle:
add the sides

$$P = 3x - 2 + 4x + 9 + 5x + 1$$
$$= \underline{3x + 4x + 5x} - \underline{2 + 9 + 1}$$

$$P = 12x + 8$$

ii) If $x = 5.2\text{cm}$, what is the perimeter?

$$P = 12x + 8$$

$$= 12(5.2\text{cm}) + 8$$

$$P = 62.4 + 8$$

$$P = 70.4\text{cm}$$

\therefore the perimeter is
70.4cm.

h) THE BIG QUESTION

$$3x^2 - 5x + 8x - 4x^2 + 2y$$

$$= 3x^2 - 4x^2 + 2x^2 - 5x + 8x$$

$$= x^2 + 0x - 2y + 1000$$

$$+ 2x^2 - 3x - 4y + 1000$$

$$- 3x + 2y - 4y + 1000$$