

Q6: 
$$\frac{(x(-y)) + \frac{x+y}{x-y}}{(x-y)} \div \frac{2x^2 + 6x}{x^2 - 2xy + y^2}$$

BEDMAS

LCD:  $1(x-y)$   
 LCD:  $x-y$

$$\left( \frac{x-y}{x-y} + \frac{x+y}{x-y} \right) \div \frac{2x^2 + 6x}{x^2 - 2xy + y^2}$$

$$\left[ \frac{(x-y) + (x+y)}{(x-y)} \right] \div \frac{2x^2 + 6x}{x^2 - 2xy + y^2}$$

$$\left[ \frac{x + x - y + y}{x-y} \right] \div \frac{2x^2 + 6x}{x^2 - 2xy + y^2}$$

$$\left[ \frac{2x}{x-y} \right] \div \frac{2x^2 + 6x}{x^2 - 2xy + y^2}$$

1: FACTOR

①  $2x(x+3)$

②  $x^2 - 2xy + y^2$

$x^2 - xy - xy + y^2$

$x(x-y) - y(x-y)$

$(x-y)(x-y)$

$$\left[ \frac{2x}{x-y} \right] \div \frac{2x(x+3)}{(x-y)(x-y)}$$

$$\frac{2x}{x-y} \times \frac{(x-y)(x-y)}{2x(x+3)} = \frac{2x(x/y)(x-y)}{(x/y)2x(x+3)} = \frac{x-y}{x+3}$$

1: FACTOR

2: Simplify

3. Perform operation following the order of BEDMAS
4. FACTOR / Simplify

$$\left[ \frac{(x-1)(x+2)}{(x-1)} + 2 \right]$$

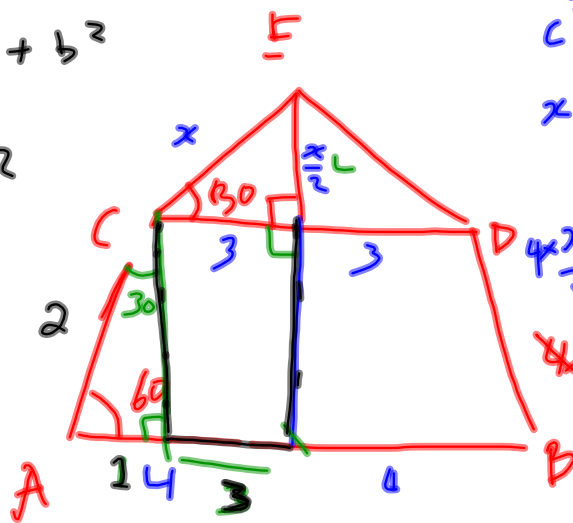
$(x+2) + 2$   
 $x + 4$

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

$$2^2 = 1^2 + b^2$$

$$4 - 1 = b^2$$

$$b = \sqrt{3}$$



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

$$x^2 = \left(\frac{x}{2}\right)^2 + 3^2$$

$$4 \times \frac{x^2}{4} - \frac{x^2}{4} = 9$$

$$4 \times \frac{3x^2}{4} = 9 \times 4$$

$$\frac{3x^2}{3} = \frac{36}{3}$$

$$x = \sqrt{12}$$

$$x = \sqrt{12}$$

$$EF = \sqrt{3} + \frac{\sqrt{12}}{2}$$

$$= 3.4$$