

$$\frac{3(x-2)^2}{3} = \frac{36}{3}$$

$$\sqrt{(x-2)^2} = \sqrt{12}$$

$$\frac{x-2}{+2} = \frac{\pm\sqrt{12}}{+2}$$


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$$x = 2 \pm \sqrt{12}$$

$$2 \pm 2\sqrt{3}$$

$$\{2 + 2\sqrt{3}, 2 - 2\sqrt{3}\}$$

$\sqrt{4}$   
 $2$   
 $-2$

$\sqrt{4 \cdot 3}$   
 $2\sqrt{3}$

$$x^2 - 6x + 9 = 49$$

$$\sqrt{(x-3)^2} = \sqrt{49}$$

$$x-3 = \pm\sqrt{49}$$

$$\frac{x-3}{+3} = \frac{\pm 7}{+3}$$


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$$x = 3+7 \quad x = 3-7$$

$$x = 10 \quad x = -4$$

$$\{10, -4\}$$

$\frac{9}{3 \cdot 3}$   
 $x^2 - 6x + 9$   
 $(x-3)(x-3)$   
 $x^2 - 3x - 3x + 9$   
 $x^2 - 6x + 9$

- ①  $\sqrt{\quad}$  both sides
- ② Divide by 5  
 $\sqrt{\quad}$  both sides
- ③ Divide by 3  
 $\sqrt{\quad}$  both sides
- ④ { Factor left side
- ⑤ { (perfect trinomial)
- ⑥ {  $\sqrt{\quad}$  both sides
- ⑦
- ⑧

⑨-⑭  $\sqrt{\quad}$  both sides

⑮ Divide by 3  
 $\sqrt{\quad}$  both sides