

1. a  $3x + 2 = 5x + 2$

$\Rightarrow 2x = 0$

$\Rightarrow x = 0$

2  $ax + b = 0$

$\Rightarrow ax = -b$

$\Rightarrow x = -\frac{b}{a}$

(b)  $4x - 18 = 2$

$\Rightarrow 4x = 20$

$\Rightarrow x = 5$

(c)

(c)  $4x + 7 = x + 2$

$\Rightarrow 3x = -5$

$\Rightarrow x = -\frac{5}{3}$

3.  $8x - 3 = 25 + 17x$

$\Rightarrow -9x = 28$

$\Rightarrow x = -\frac{28}{9}$

(c) rational no.

(d)  $5x - 8 = x + 4$

$\Rightarrow 4x = 12$

$\Rightarrow x = 3$

4. (a)

transposition

(c)  $-\frac{5}{3}$  is neither a fraction nor an integer

5.  $\frac{5x}{3} - 4 = \frac{2x}{5}$

Mul. both sides by 15

$\frac{5}{3}x \times 15 - 4 \times 15 = \frac{2}{5}x \times 15$

$\Rightarrow 25x - 60 = 6x$

$\Rightarrow 19x = 60$

$\Rightarrow x = \frac{60}{19}$

5 cont

$2x - 7$

$= 2 \times \frac{60}{19} - 7$

$= \frac{120 - 133}{19}$

$= -\frac{13}{19}$  (b)