

STEPS TO SOLVING EQUATIONS

- Clear out any fractions by Multiplying every term by the denominator.
- Add or Subtract the same value from both sides.
- Divide every term by the same value. (never divide by zero)

pg 334 example 1

4 grandchildren

each gets \$ 5 in the end

They all get the same.

How many total gift cards?

$$\left(\frac{x}{4}\right)^{\times 4} = (5)^{\times 4}$$
$$x = 20$$

$$\cancel{\left(\frac{2}{9}x\right)^3} = \cancel{(8)^3}$$

$$2x = 24$$

Solve like
you're used to

$$\cancel{2x = 24}$$
$$\downarrow \div 2$$
$$x = 12$$

$$\cancel{\left(\frac{-2}{9}x\right)^3} = 2^3 \times 9$$

$$\cancel{-2x = 18}$$

$$\cancel{\div -2}$$
$$\downarrow \div -2$$

$$x = -9$$

$$\frac{1}{4}x = \frac{3}{2}x^4$$

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

$$\left(\frac{3}{4}\right)^{x^4} + \left(\frac{1}{2}x\right)^{x^4} = \left(6\right)^{x^4}$$

$$3 + \frac{4}{2}x = 24$$

$$3 + 2x = 24$$

Solve as you're used to

$$\cancel{3} + 2x = \cancel{24}$$

$$2x = \frac{21}{2}$$

$$x = 10.5$$

$$\frac{1}{4}x = \infty$$

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