

15.21

pumpunni	reian k�ltoimjo ⁴ (cm ⁴)
1	1,2 ⁴
x	1,9 ⁴

 $\Rightarrow \frac{1}{x} = \frac{1,2^4}{1,9^4}$ |X

$\Rightarrow x \cdot 1,2^4 = 1 \cdot 1,9^4 \quad | : 1,2^4$

$\Rightarrow x = \frac{1,9^4}{1,2^4} \approx 6,285 \Rightarrow$ 7 pumpunne
↑
pyoritetyt ytoimjo

15.12 a)

teho (W)	ilmam�nne ³ ($\frac{m^3}{s^3}$)
1500	14 ³
P	20 ³

 $\frac{1500}{P} = \frac{14^3}{20^3}$ |X

$\Rightarrow 14^3 \cdot P = 20^3 \cdot 1500 \quad | : 14^3$

$\Rightarrow P = \frac{20^3 \cdot 1500}{14^3} \approx 4373,18 \approx$ 4400 (W)

b)

teho (W)	ilmam�nne ³ ($\frac{m^3}{s^3}$)
1500	14 ³
P	10 ³

 $\frac{1500}{P} = \frac{14^3}{10^3}$ |X

$\Rightarrow P = \frac{10^3 \cdot 1500}{14^3} \approx 546,647$ (W)

\Rightarrow teho pienenee: $\frac{1500 \text{ W} - 546,647 \text{ W}}{1500 \text{ W}} \approx 0,63557 \approx$ 64%

15.7 a)

h�t� (e)	massa (kg)	Suoran verrannolliset:
7,5	2,5	$\frac{7,5}{y} = \frac{2,5}{x} \quad X$
y	x	

$\Rightarrow 2,5y = 7,5x \quad | : 2,5$

$\Rightarrow y = \frac{7,5x}{2,5} = \frac{7,5}{2,5}x =$ 3x

b) $k = 3 \frac{e}{kg}$: 2 ilmaisee kilohunaa

c) $x = 760 \text{ g} = 0,76 \text{ kg} \Rightarrow$ h t  : $y = 3 \cdot 0,76 =$ 2,28 (e)

d) $y = 3x = 13,65 \quad | : 3 \Rightarrow x = \frac{13,65}{3} =$ 4,55 (kg)

