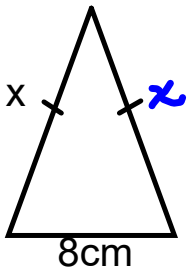
Warm Up Grade 7

1) The base of an isosceles triangle is 8 cm. What is the length of the sides if the perimeter is 32 cm?



$x + x + 8 = 32$

$2x + 8 = 32$

$2x + 8 - 8 = 32 - 8$

$2x = 24$

$\div 2 \quad \div 2$

$x = 12$

2) Solve using balances $3n + 11 = 26$

$3n + 11 - 11 = 26 - 11$

$3n = 15$

$\div 3 \quad \div 3$

$n = 5$

p229

1a) $20+a=50$

$20+a-20=50-20$

$a=30$

b) $15+b=80$

$15+b-15=80-15$

$b=65$

c) $65=c+15$

$65-15=c+15-15$

$50=c$

d) $2d+3=45$

$2d+3-3=45-3$

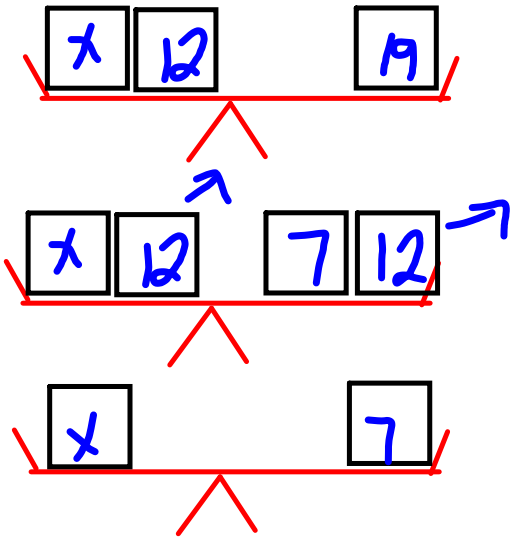
$2d=42$

$\frac{2d}{2}=\frac{42}{2}$

$d=21$

2)

$x+12=19$



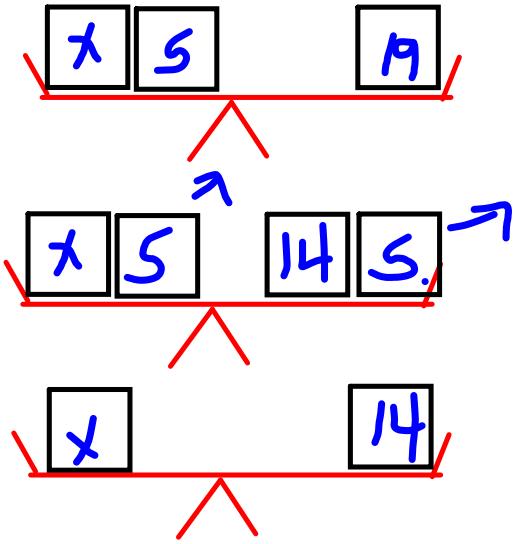
$x+12-12=19-12$

$x=7$

LS
$x+12$
$7+12$
19

RS
19

ii) $x+5=19$



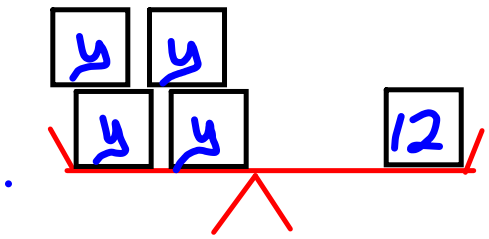
$x+5-5=19-5$

$x=14$

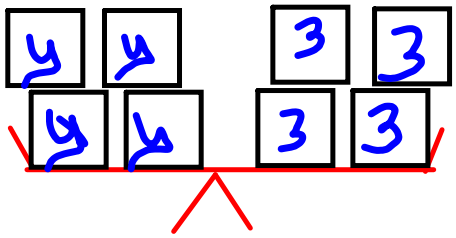
LS
$x+5$
$14+5$
19

RS
19

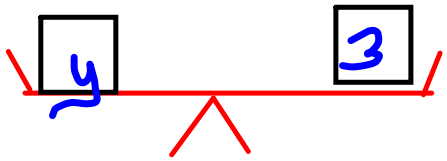
i) $4y = 12$



$\frac{4y}{4} = \frac{12}{4}$



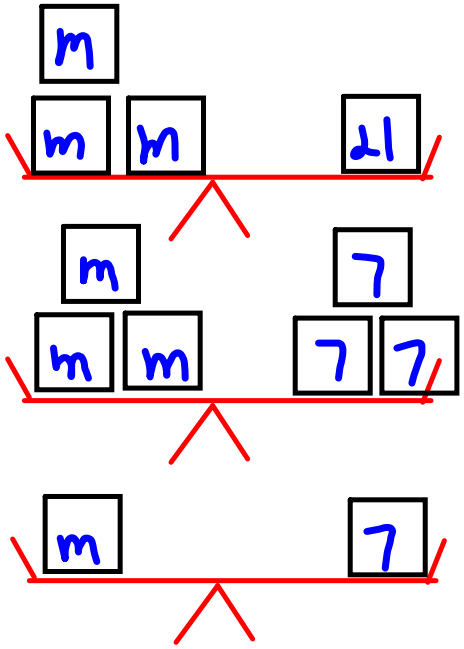
$y = 3$



LS
$4y$
4×3
12

RS
12

ii) $3m = 21$



$\frac{3m}{3} = \frac{21}{3}$

$m = 7$

LS
$3m$
3×7
21

RS
21

2 ii) $3k+7=31$

$3k+7-7=31-7$

$3k=24$

$\frac{3k}{3}=\frac{24}{3}$

$k=8$

LS
$3k+7$
$3\times8+7$
$24+7$
31

RS
31

iii) $2p+12=54$

$2p+12-12=54-12$

$2p=42$

$\frac{2p}{2}=\frac{42}{2}$

$p=21$

LS
$2p+12$
$2\times21+12$
$42+12$
54

RS
54

3 n = the number

a) $n+5=24$

$n+5-5=24-5$

$n=19$

LS: $n+5$, $19+5$, 24 RS: 24

b) $n+8=32$

$n+8-8=32-8$

$n=24$

LS: $n+8$, $24+8$, 32 RS: 32

c) $3n=42$

$\frac{3n}{3}=\frac{42}{3}$

$n=14$

LS: $3n$, 3×14, 42 RS: 42

d) $5+2n=37$

$5+2n-5=37-5$

$2n=32$

$\frac{2n}{2}=\frac{32}{2}$

$n=16$

LS: $5+2n$, $5+2\times16$, $5+32$, 37 RS: 37

4a) $A = 5h$

$60 = 12h$

$12h = 60$

$\frac{12h}{12} = \frac{60}{12}$

$h = 5$

b) $A = 5h$

$112 = 8h$

$\frac{112}{8} = \frac{8h}{8}$

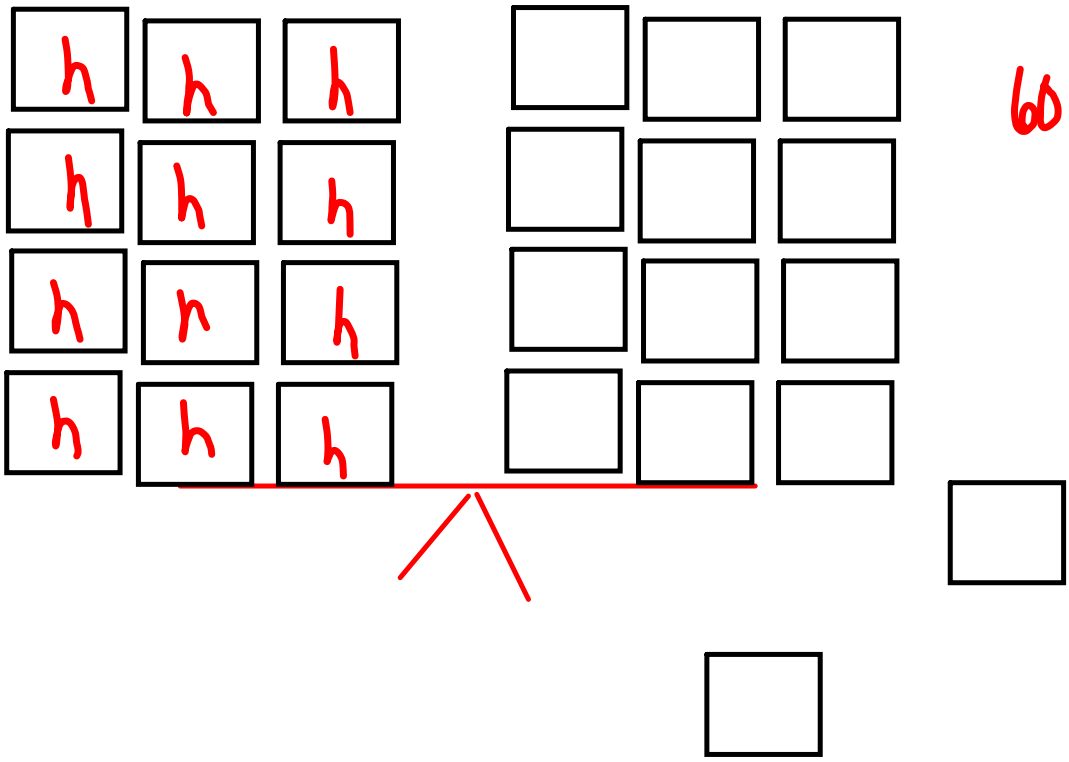
$14 = h$

c) $A = 5h$

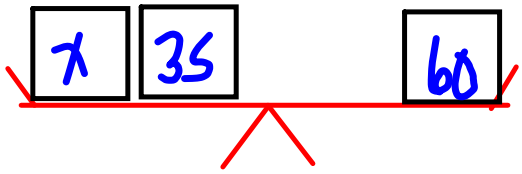
$169 = 13h$

$\frac{169}{13} = \frac{13h}{13}$

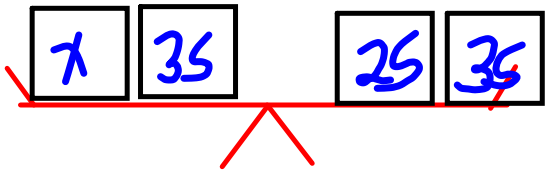
$13 = h$


h
60

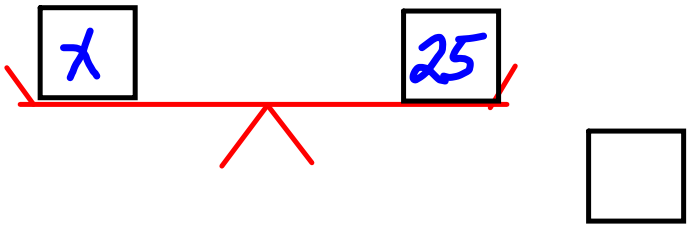
5. $x+35=60$



$x+35-35=60-35$



$x=25$



6. Discuss

Class / Homework

Sheet 136 # 1-7

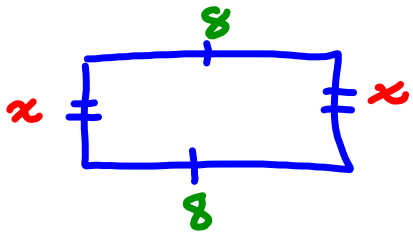
brief review

2c)

$10 = c + 5$ -5 -5

$5 = c$

6)



$x + x + 8 + 8 = 44$

$2x + 16 = 44$

Attachments

Sheet 136 Solving equations.pdf