

HW 21

p103

AAT

53. $2.80 = r \cdot 1.51$
 $1.85 = r$

So 85% increase

54. $42.72 = r \cdot 30.37$
 $1.41 = r$

So 41% increase

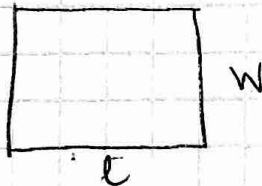
55. $2.23 = r \cdot 1.63$
 $1.37 = r$

So 37% increase

56. $49.79 = r \cdot 45.27$
 $1.10 = r$

So 10% increase

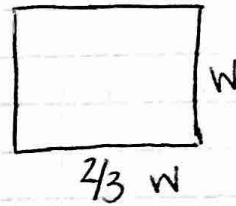
57. a)



b) $l = 1.5w$
 $2(1.5w) + 2w = 25$
 $3w + 2w = 25$
 $5w = 25$
 $w = 5$

c) $5 \times 7.5 \text{ m}$

58. a)



b) $h = \frac{2}{3}w$
 $2(\frac{2}{3}w) + 2w = 3$
 $\frac{4}{3}w + \frac{4}{3}w = 3$
 $\frac{10}{3}w = 3$
 $w = \frac{9}{10}$

c) $\frac{9}{10} \times \frac{3}{5} \text{ m}$

59. $\frac{87 + 92 + 84 + x}{4} = 90$

$360 = 263 + x$
 $97 = x$

60. $\frac{87 + 92 + 84 + x}{500} = \frac{90}{100}$

$100(263 + x) = 45000$
 $263 + x = 450$
 $x = 187$

81. $A = (\frac{1}{2}bn) \cdot 2$
 $2A = bn$
 $\frac{2A}{b} = n$

82. $A = \frac{1}{2}(a+b)n$
 $2A = n(a+b)$
 $\frac{2A}{n} = a+b$

$\frac{2A}{n} - a = b$



$$83. S = C + RC$$

$$S = C(1+R)$$

$$\boxed{\frac{S}{1+R} = C}$$