p 371

1. $A = \frac{1}{2} d D$

$d = 4m$

$D = 3m$

$A = \frac{1}{2}(4)(3)$

$A = \frac{1}{2}(12)$

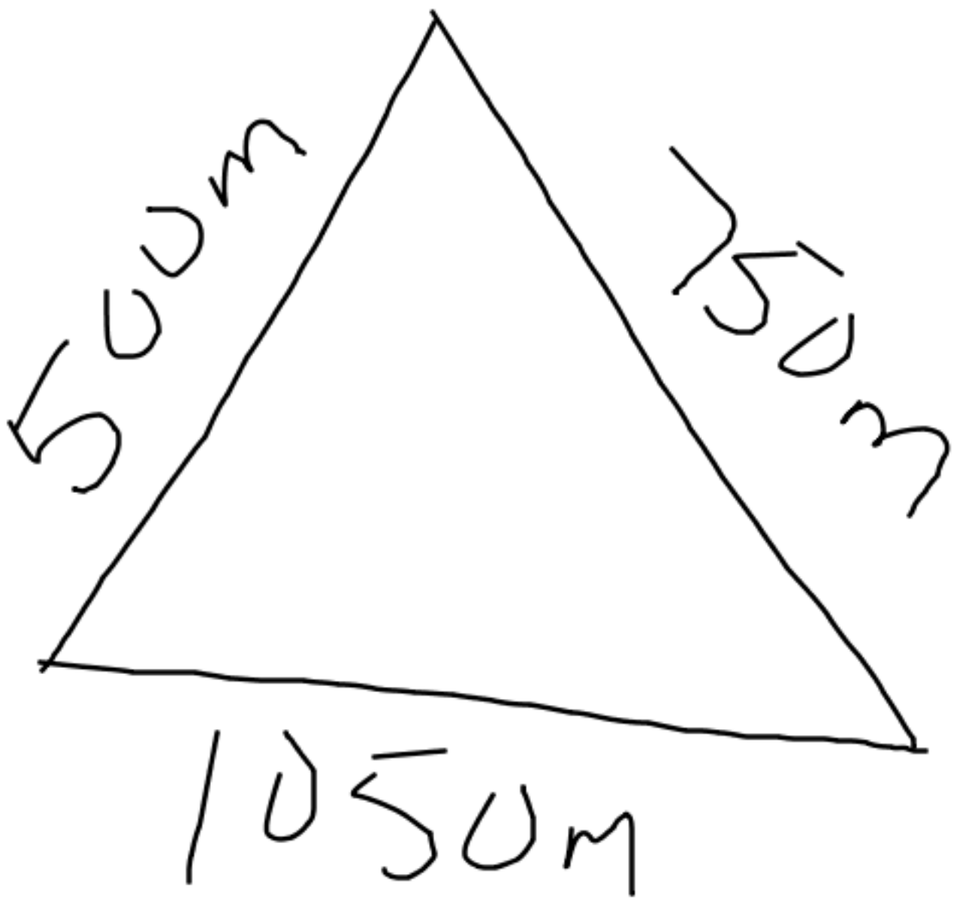
$A = 6m$

2. $h = 198 - 0.9a$

$h = 198 - 0.9(16)$

$h = 198 - 14.4$

$h = 183.6$ beats per minute



$$A = \sqrt{s(s-a)(s-b)(s-c)}$$

$$A = \sqrt{1150(1150-500)(1150-750)(1150-1050)}$$

$$A = \sqrt{1150(650)(400)(100)}$$

$$A = \sqrt{(747,500)(40,000)}$$

$$A = \sqrt{29,900,000,000}$$

$$A = 172,916.16\ m^2$$

$$s = \frac{a+b+c}{2}$$

$$s = \frac{500+750+1050}{2}$$

$$s = 1,150$$

8.

a) $(-3)^2$

$= 9$

b) -3^2

$= -9$

c) -3^{-2}

$= -\frac{1}{3^2} = -\frac{1}{9}$

d) $(-3)^{-2}$

$= \frac{1}{9}$

9. a) $p^4 \times p^{-2}$

$= p^2$

c) $(p^{-2})^5$

b) $p^3 \div p^8$

$= p^{-5}$

$= p^{-10}$

10

a) $x^7 y^{-2} x^3$

$= \frac{x^{10}}{y^2}$

$= \frac{(-3)^{10}}{4^2}$

$= \frac{59049}{16}$

$x = -3 \quad y = 4$

$z = 5$

b) $\frac{x^5 y^2 z^3}{x^{-1} y^0 z}$

$= x^6 y^2 z^2$

$= (-3)^6 (4)^2 (5^2)$

$= 729 (16)(25)$

$= 291,600$

12. a) $16^{\frac{1}{2}}$

$= \sqrt[2]{16}$

$= 4$

b. $64^{\frac{1}{3}}$

$\sqrt[3]{64}$

$= 4$

c) $25^{\frac{3}{2}}$

$\left(\sqrt[2]{25}\right)^{3}$

$= 5^{3}$

$= 125$

Quest fun thing Wed.

P. 40

1. $E = 250 + .10 \leq$

$E = 250 + .10(8000)$

$E = 250 + 800$

$E = \$1050$

Suzie earned $1050 that month

3. $C = 0.006h + 0.45$

$C = 0.006(1000) + 0.45$

$C = 6 + .45$

$C = \$6.45$

6.45
$-\ 5.05$
$\$1.40$

$C = 0.004h + 1.05$

$C = 0.004(1000) + 1.05$

$C = 4 + 1.05$

$C = 5.05$

∴ Houd would save $1.40 using energy saver bulbs.