

~~$$a) i) S_n = \frac{n}{2} (a+l)$$~~

~~$$S_n = \frac{n}{2} (2+32)$$~~

~~$$ii) S_n = \frac{a(r^n - 1)}{r - 1}$$~~

~~$$= \frac{2(1.5^n - 1)}{1}$$~~

b)

a) i). Catrine Threw the stick

$$21 \text{ times} - T_n = a + (n-1)d$$

~~TR = 21~~

~~$$ii) S_n = \frac{n}{2} (a+l)$$~~

$$S_{32} = \frac{32}{2} (a+l)$$

$$= 16(2+32)$$

$$= 544$$

∴ Catrine's dog
ran 544m.



$$b) l = r\theta \text{ (where } \theta \text{ is in radians)}$$

$$38 = 20\theta$$

~~$$\frac{38}{20} = \theta$$~~

$$\theta = \frac{38}{20}$$

~~$$c) \text{ vertex} = \text{ / }$$~~