



a) 2m, 3.5, 5, ..., 32m

$$T_n = a + (n-1)d$$

$$32 = 2 + (n-1)1.5$$

$$32 = 2 + 1.5n - 1.5$$

$$32 = 1.5n + 0.5$$

$$n = 21$$

she threw it 21 times.

$$S_n = \frac{n}{2}(a + d)$$

$$S_{21} = \frac{21}{2}(2 + 32)$$

$$10.5(34)$$

$$S_{21} = 357 \text{ m}$$

$$357 \times 2 \text{ (The return)}$$

$$= 714 \text{ m.}$$



b)

$$s = r\theta$$

$$s = 38$$

$$r = 20$$

$$38 = 20\theta$$

$$\theta = 1.9^\circ$$

$$\theta = 2^\circ$$

c) $(x-h)^2 = 4a(y-k)$ vertex = (h, k)