1)

a) $X = \{60g, 56g, 61g, 68g, 51g, 53g, 69g, 54g\}$

media

$$= \frac{(60+56+61+68+51+53+69+54)g}{8} = 59g$$

mediana

51g, 53g, 54g, [56g, 60g], 61g, 68g, 69g

$$\text{mediana} = \frac{(56+60)g}{2} = 58g$$

varianza

$$\sigma^2 = \frac{(60g-59g)^2+(56g-59g)^2+(61g-59g)^2+(68g-59g)^2+(51g-59g)^2+(53g-59g)^2+(69g-59g)^2+(54-59g)^2}{8}$$

$$= 40g^2$$

desviación estándar $\sigma = \sqrt{40} = 6.32g$

b) $X = \{44, 49, 62, 52, 49, 54, 53, 48, 46, 51\}$

media $= \frac{44+49+62+52+49+54+53+48+46+51}{10} = 50.8$

mediana $44, 46, 48, 49, \boxed{49, 51}, 52, 53, 54, 62$

$= \frac{49+51}{2} = 50$

varianza

$$\sigma^2 = (44-50.8)^2 + (49-50.8)^2 + (62-50.8)^2 + (52-50.8)^2 + (49-50.8)^2 + (54-50.8)^2 + (53-50.8)^2 + (48-50.8)^2 + (46-50.8)^2 + (51-50.8)^2$$

$$= 22.56$$

desviación estandar $\sigma = \sqrt{22.56} = 4.75$