

#8

$$S = \cancel{2ab} + \cancel{2bc} + 2ac$$

$$a) \quad S - 2bc = \cancel{2ab} + 2ac$$

$$S - 2bc = a(\cancel{2b} + 2c)$$

$$\frac{S - 2bc}{\cancel{2b} + 2c} = \frac{a(\cancel{2b} + 2c)}{\cancel{2b} + 2c}$$

$$\frac{S - 2bc}{2b + 2c} = a$$

$$b) \quad a = \frac{158 - 2(5)(8)}{2(5) + 2(8)}$$

$$a = \frac{158 - 80}{10 + 16}$$

$$= \frac{78}{26}$$

$$a = 3$$

#9

$$M = 3A + 100$$

$$a) \quad M - 100 = 3A$$

$$\frac{M - 100}{3} = \frac{\cancel{3}A}{\cancel{3}}$$

$$A = \frac{M - 100}{3}$$

$$b) \quad A = \frac{400 - 100}{3}$$

$$= \frac{300}{3}$$

$$A = 100$$