

~~6.25 + 625~~

6

$$a = \sqrt[3]{6 \times \frac{625}{12}}$$

$$= 5 \sqrt[3]{\frac{5}{12}}$$

9) a) $P(X > 60)$ $z = \frac{X - \mu}{\sigma} = \frac{60 - 46}{10} = 1.4$

Prob: $1 - 0.9192 = 0.0808$

b) $Z = \frac{X - \mu}{\sigma}$ $P(X < 60) = 0.85$
So $z = 1.04$

$$1.04 = \frac{60 - \mu}{12} \text{ so } \mu = 60 - 12 \times 1.04 = 47.52$$

c) i) take route A since

ii) $P(X > 60) = 0.0808$

But 0.15 for Route B.

i) ~~0.75~~
 $0.75^5 = 0.4438$

ii) ~~A~~ B (5, 0.75)