

ATT DILEMMA PLANS

EQUATIONS FOR EACH PLAN

$$\text{I: } y = .07x \quad \begin{array}{l} y = \text{cost} \\ x = \text{minutes} \end{array}$$

$$\text{II: } y = .05x + 3.95$$

$$\text{III: } y = 19.95$$

CONDUCT COMPARISON OF PLANS

$$\begin{aligned} \text{I} \neq \text{II} &\Rightarrow .07x = .05x + 3.95 \\ &.02x = 3.95 \quad (\text{multiply by } 100) \\ &2x = 395 \\ &x = \frac{395}{2} = 197.5 \text{ min} \end{aligned}$$

If more than 197.5 (3 hr, 17.5 min) \Rightarrow II

$$\begin{aligned} \text{II} \neq \text{III} &\Rightarrow .05x + 3.95 = 19.95 \\ &.05x = 16.00 \quad (\text{mult. by } 100) \\ &5x = 1600 \\ &x = 320 \text{ min} \quad (5 \text{ hr } 20 \text{ min}) \end{aligned}$$

If more than 320 min \Rightarrow III

$$\begin{aligned} \text{I} \neq \text{III} &\Rightarrow .07x = 19.95 \\ &7x = 1995 \Rightarrow 7 \sqrt{1995} \\ &x = 285 \text{ min} \end{aligned}$$

If more than 285 min \Rightarrow III