#17-20 EOC

(17) $\$30 + \$10 = \$40$

↑ original cost of box — ↑ Profit — ↑ total that needs to be charged

$$\frac{\$40}{50 \text{ bars}} = \boxed{\$0.80}$$

(18) $E = mc^2$

$$\frac{E}{c^2} = \frac{mc^2}{c^2}$$

$$\boxed{\frac{E}{c^2} = m}$$ (D)

(19) $V = 20.8x^2 - 458.3x + 3500$ ← Quadratic!!

What year did the car have the least value?

↑ minimum

V = value

x = year ← x value of minimum (axis of sym)

$$\frac{-b}{2a} = \frac{458.3}{2(20.8)} = 11.0 \text{ years}$$

$1964 + 11 = \boxed{1975}$ C

(20) $(x^{1/3})^{-3} = x^{1/3 \cdot -3} = x^{-1} = \boxed{\frac{1}{x}}$ B