

MIT

Unit 1 Can You Key (Cont)

20 $2000 \text{ bytes} \times \frac{8 \text{ bits}}{1 \text{ byte}} = 16,000 \text{ bits}$

21 $C = \pi d \quad C = \pi 6787 \Rightarrow 21321.99 \text{ km}$

$21322 \text{ km} \times \frac{1000 \text{ m}}{1 \text{ km}} \times \frac{1 \text{ ft}}{0.3 \text{ m}} \times \frac{1 \text{ martian}}{3 \text{ ft}} = 23,691,099 \text{ martians}$

22 $N_2 = 8000 \cdot 2^{(15/2)}$
 $= \underline{\underline{362038.672}}$

23 $m = \frac{y_2 - y_1}{x_2 - x_1}$

