

Unit 3 Day 8

Key!

- ① (a) \$7.50
(b) 324 keepsakes
- ② $y = \frac{0.02x + 3500}{x}$, at least 2365 pages
- ③ $\frac{60}{3-c} = 2 \left(\frac{60}{3+c} \right)$, current speed = 1 m/h
- ④ $\frac{150}{32-c} + \frac{150}{32+c} = 10$, Current speed = 8 m/h
- ⑤ $\frac{510}{255} + \frac{510}{255+x} = 3.9$, about 13 mi/h tail wind
- ⑥ $\frac{720}{295} + \frac{720}{295+x} = 5$, about 14 mi/h head wind
- ⑦ $\frac{8}{8+x} = \frac{3}{x}$, Walker speed = 4.8 km/h, Cyclist 12.8^{km/h}
- ⑧ $\frac{1}{2} + \frac{1}{4} = \frac{1}{t}$, $\frac{4}{3}$ of an hour.
- ⑨ $\frac{1}{x} + \frac{1}{x+7} = \frac{1}{12}$, Hank will take 21 hours.
- ⑩ $\frac{500}{x} + \frac{500}{4x} = 5$, Tom: 1250min. Huck: 5000min.
- ⑪ $x + \frac{1}{x} = \frac{29}{10}$, $x = \frac{2}{5}$