FEBRUARY 3, 2015

5th
6th

STARTER

Distribute and write the answer with the terms in the correct order.

1. $3(4x-6)$

$=12x-18$

2. $-4(-2n+5)$

$=8n-20$

3. $5(-3+2a)$

$=-15+10a$

$=10a-15$

4. $-2(4-5k)$

$=-8+10k$

$=10k-8$

2/3 Comparing Rates with Different Units

Which do you think is **FASTER** ?

an antelope or a cheetah

60 mph

103 ft/sec

$$\frac{60\ \text{mi}}{1\ \text{hr}} \cdot \frac{5280\ \text{ft}}{1\ \text{mi}} \cdot \frac{1\ \text{hr}}{3600\ \text{sec}}$$

$$= \frac{5280\ \text{ft}}{60\ \text{sec}}$$

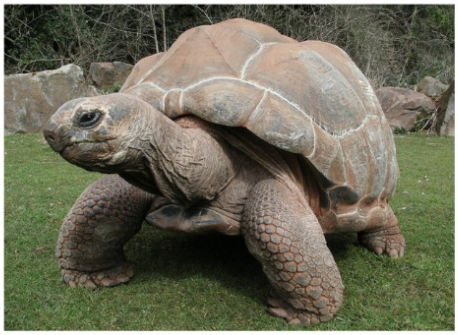
$$= 88\ \text{ft/sec}$$

$$\frac{103\ \text{ft}}{1\ \text{sec}} \cdot \frac{3600\ \text{sec}}{1\ \text{hr}} \cdot \frac{1\ \text{mi}}{5280\ \text{ft}}$$

$$= \frac{370800\ \text{mi}}{5280\ \text{hr}} = 70.23\ \text{mph}$$

Which do you think is **FASTER** ?

a giant tortoise or a 3-toed sloth



0.2 ft/sec

0.2 mph

$$\frac{0.2\ \text{ft}}{\text{sec}} \cdot \frac{1\ \text{mi}}{5280\ \text{ft}} \cdot \frac{3600\ \text{sec}}{1\ \text{hr}}$$

$$= \frac{720\ \text{mi}}{5280\ \text{hr}} \approx 0.14\ \text{mph}$$

0.29 ft/sec

0.2 × 3600 = 720

720 ÷ 5280 = 0.136364

Which do you think is **FASTER**?

an elephant or a giraffe

36.6 ft/sec

31.1 *mph*

$$\frac{36.6\ \text{ft}}{1\ \text{sec}} \cdot \frac{1\ \text{mi}}{5280\ \text{ft}} \cdot \frac{3600\ \text{sec}}{1\ \text{hr}} = \frac{131760\ \text{mi}}{5280\ \text{hr}} = 24.95\ \text{mph}$$

36.6 × 3600 = 131760

131760 ÷ 5280 = 24.954545

Which do you think is FASTER ?

a chicken or a squirrel

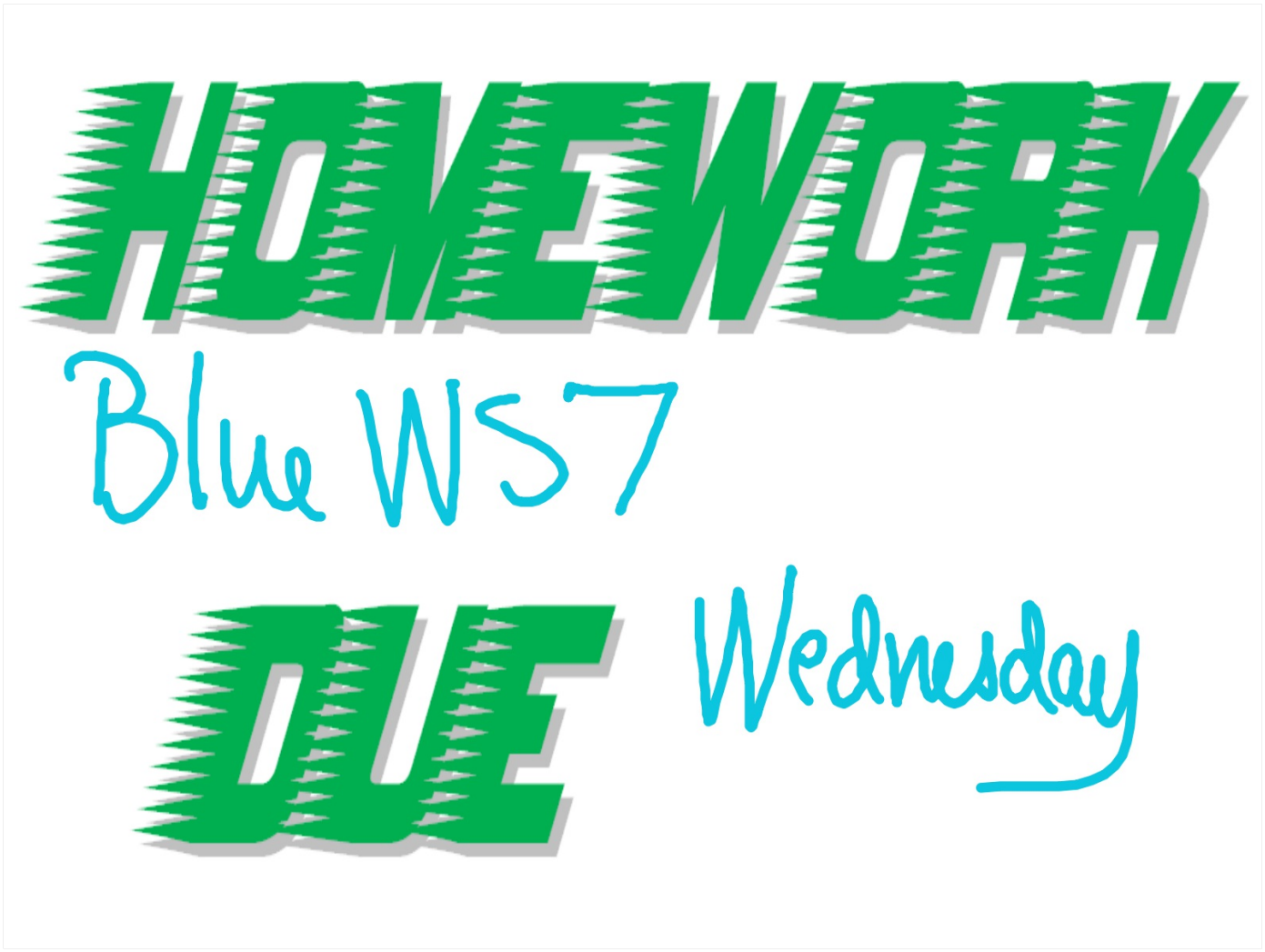
13.2 ft/sec

12 mph

$$\frac{12\ \text{mi}}{1\ \text{hr}} \cdot \frac{5280\ \text{ft}}{1\ \text{mi}} \cdot \frac{1\ \text{hr}}{3600\ \text{sec}}$$

$$= 17.6\ \text{ft/sec}$$

$5280 \div 300 = 17.6$


HOMEWORK
Blue WS 7
DUE
Wednesday