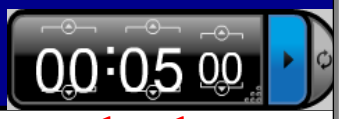
September 16th

Due Today: VN 1.4 + HW 1.4
Due Next Class: HW 1.5

Unit 1: Beat the Basics
Lesson #: 1.5: Rates Review



Get Ready: Check HW:

Please get your calculuator!

1. a) 0.83 hours b) 100 meters c) 50 feet/mile
2. 120 km
3. 45 mi
4. 33.33 mi
5. 4 hr
6. 90 km/hr
7. 6,000 ft
8. yes-96 km/hr
9. neil - 4.5 hrs grant - 4.8 hrs- grant took longer
10. $0.67/can
11. $12.42
12. 10lb bag - $1.30/lb 8lb bag - $1.38/lb - 10lb is better deal
13. 1) 61% 2) 6.65 3) 213.7 4) 122.4

Aug 5-9:51 PM

HW Review

$D = R \cdot T$

(3) $R = 15$ mph
$t = 3$ hrs
$D = ?$
$D = (15)(3)$
$D = 45$ mi

(4) $D = 10$ mi $t = 1.5$ hrs

$R = ?$

$D = R \cdot t$

$\frac{10}{1.5} = \frac{R(1.5)}{1.5}$

$6.66 = R$
mi/hr

$t = 5$ hrs

$D = (6.66)(5)$
$D = 33.33$ mi

13.4) What is 240% of 51?

$\% = \frac{P}{W}$

$240\% = \frac{P}{51}$

$\frac{240}{100} = \frac{P}{51}$

$\frac{12{,}240}{100} = \frac{100P}{100}$

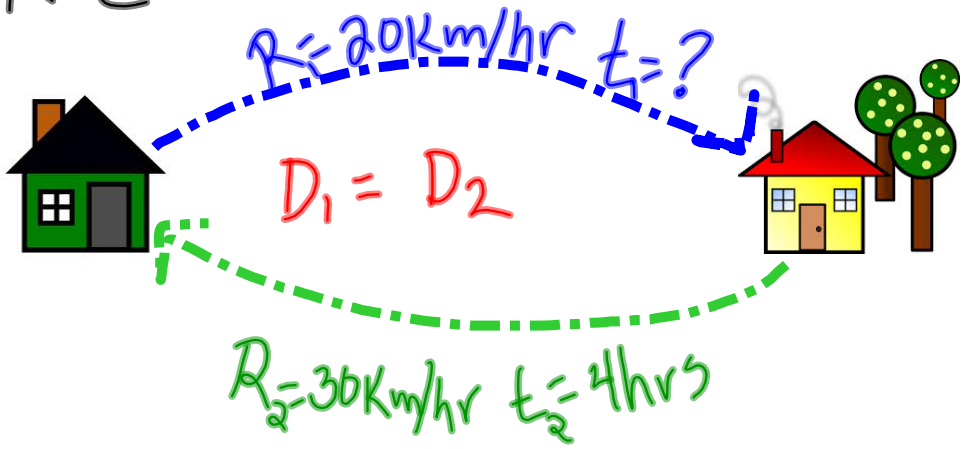
$122.4 = P$

Dec 1-6:47 PM

Round Trip Travel Problems

John traveled to his friend's house and back. On the trip there he traveled 20 km/hr and on the return trip he went 30 km/hr. How long did the trip there take if the return trip took four hours?

$D = R \cdot t$



$D_2 = R_2 \cdot t_2$

$= (30)(4)$

$D_2 = 120 \text{ km}$

$D_1 = R_1 \cdot t_1$

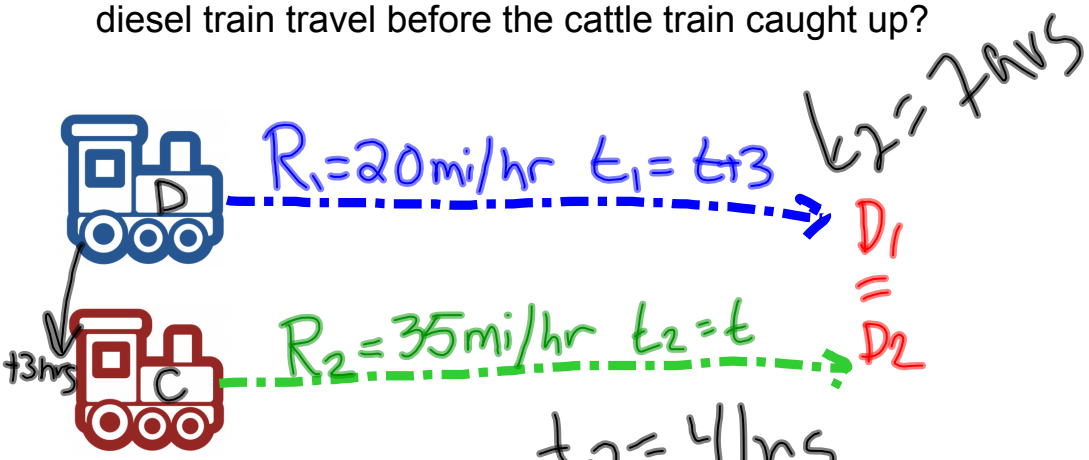
$\frac{120}{20} = \frac{(20)t_1}{20}$

$6 = t_1$

The trip there took 6 hrs

Catch Up Travel Problems

A diesel train left Miami and traveled east at an average speed of 20 mph. A cattle train left three hours later and traveled in the same direction but with an average speed of 35 mph. How long did the diesel train travel before the cattle train caught up?



$D_1 = R_1 \cdot t_1$ $D_2 = R_2 \cdot t_2$

$R_1 \cdot t_1 = R_2 \cdot t_2$

$(20)(t+3) = (35)(t)$

$20t + 60 = 35t$

$-20t \quad -20t$

$\frac{60}{15} = \frac{15t}{15}$

$4 = t$

The deisel train traveled for 7 hours before the cattle train caught up.

Dec 2-4:22 PM

For all round trip + catch up problems you should

DRAW A PICTURE!

Sep 16-9:17 AM

Practice Problems

Work through the round trip & catch up problems that are being passed out.

You will work in small groups.

We will share out at _____

It's Brian's birthday today and his mother has planned a surprise party at their house. However, she left from work later than usual and is trying to rush home. Her job is 45 miles from their home and she drove at 60 mph trying to get there on time.

Brian left from school at the same time that his mother left from work, but he has to make a few stops. First, he walks with his friend to drop them off at his house which is 1 mile away and they walk at about 0.5 mph. Then Brian goes to pick up his little sister from her school which is 0.2 miles away and Brian walked at about 0.5 mph. Finally, him and his sister run home which is 0.1 miles away at 1 mph.

Will Brian's mother be able to reach their house before Brian and be able to surprise him???

Sep 14-9:32 PM

Recap

In math class today we...

talked about Rates

Due Next Time:

HW 1.5

Next Class:

Unit 1 Review

Test on Thursday!