Thursday, October 9, 2014

1. Write an interesting Work problem. ☺

10
9
8
7
6
5
4
3
2
1

Pep Rally Schedule

1st block:	7:15-8:20
2nd block:	8:26-9:31
3rd block:	9:37-11:20
A lunch:	9:31-9:58
A lunch class:	10:04-11:20
B lunch:	10:15-10:39
B lunch class:	9:37-10:15; 10:44-11:20
C lunch:	10:52-11:20
C lunch class:	9:37-10:52
4th block:	11:26-2:15
A Pep Rally (A, E, Audit., O 1st and 2nd floor):	11:45-12:15
B Pep Rally (B, D, F, Mobiles):	12:40-1:10
C Pep Rally (Gym, C, Auto, O 3rd floor):	1:35-2:05

Objectives Have some fun and review some Rationals!

Homework None! It's a Homecoming Miracle!

Homework…

Solve each equation. Check each solution.

1. $\frac{x}{3} + \frac{x}{2} = 10$ 12

2. $\frac{1}{x} - \frac{x}{9} = 0$ ±3

3. $-\frac{4}{x+1} = \frac{5}{3x+1}$ $-\frac{9}{17}$

4. $\frac{4}{x} = \frac{x}{4}$ ±4

5. $\frac{3x}{4} = \frac{5x+1}{3}$ $-\frac{4}{11}$

6. $\frac{3}{2x-3} = \frac{1}{5-2x}$ $\frac{9}{4}$

7. $\frac{x-4}{3} = \frac{x-2}{2}$ −2

8. $\frac{2x-1}{x+3} = \frac{5}{3}$ 18

9. $\frac{2y}{5} + \frac{2}{6} = \frac{y}{2} - \frac{1}{6}$ 5

10. $\frac{1}{2x+2} + \frac{5}{x^2-1} = \frac{1}{x-1}$ 7

11. $\frac{2}{x+3} + \frac{5}{3-x} = \frac{6}{x^2-9}$ −9

Homework…

Use a graphing calculator to solve each equation. Check each solution.

13. $\frac{x-1}{6} = \frac{x}{4}$ **−2**

14. $\frac{x-2}{10} = \frac{x-7}{5}$ **12**

15. $\frac{4}{x+3} = \frac{10}{2x-1}$ **−17**

16. $\frac{3}{3-x} = \frac{4}{2-x}$ **6**

17. $\frac{3y}{5} + \frac{1}{2} = \frac{y}{10}$ **−1**

18. $5 - \frac{4}{x+1} = 6$ **−5**

19. $\frac{2}{3} + \frac{3x-1}{6} = \frac{5}{2}$ **4**

20. $\frac{4}{x-1} = \frac{5}{x-2}$ **−3**

21. $\frac{1}{x} - \frac{2}{x+3} = 0$ **3**

Solve each equation for the given variable.

22. $h = \frac{2A}{b}; b$ $b = \frac{2A}{h}$

23. $\frac{1}{f} = \frac{1}{d_i} + \frac{1}{d_o}; d_o$ $d_o = \frac{fd_i}{d_i - f}$

24. $\frac{h}{t} + 16t = v_o; h$ $h = v_o t - 16t^2$

25. $m = \frac{y_2 - y_1}{x_2 - x_1}; x_1$ $x_1 = x_2 - \frac{y_2 - y_1}{m}$

26. $\frac{xy}{z} + 2x = \frac{z}{y}; x$ $x = \frac{z^2}{y^2 + 2yz}$

27. $\frac{S - 2wh}{2w + 2h} = \ell; S$ $S = 2\ell w + 2wh + 2\ell h$

Homework…

28. One delivery driver can complete a route in 6 h. Another driver can complete the same route in 5 h.

a. Let N be the total number of deliveries on the route. Write expressions to represent the number of deliveries each driver can make in 1 hour. $\frac{N}{6}; \frac{N}{5}$

b. Write an expression to represent the number of hours needed to make N deliveries if the drivers work together. $\frac{N}{\left(\frac{N}{6} + \frac{N}{5}\right)}$

c. If the drivers work together, about how many hours will they take to complete the route? Round your answer to the nearest tenth. 2.7 h

29. A fountain has two drainage valves. With the first valve open, the fountain drains completely in 4 h. With only the second valve open, the fountain drains completely in 5.25 h. About how many hours will the fountain take to drain with both valves open? Round your answer to the nearest tenth. 2.3 h

30. A pen factory has two machines making pens. Together, the machines make 1500 pens during an 8-h shift. Machine A makes pens at 2.5 times the rate of Machine B. About how many hours would Machine A need to make 1500 pens by itself? Round your answer to the nearest tenth. 11.2 h

It's time to play **grudge math!**

Each team starts with 10 X's

For each question your team answers correctly, you get to remove two X's from another team's stash.

Last team on the board wins!

Yes, there's more!

If you make a basket from the 1st line, you can erase 2 more X's. From the second line, 4 X's.

You can get back on the board by answering a question correctly AND making a shot from the 1st line.