

P3-GEP Math Prep

Mixed 2

Guided

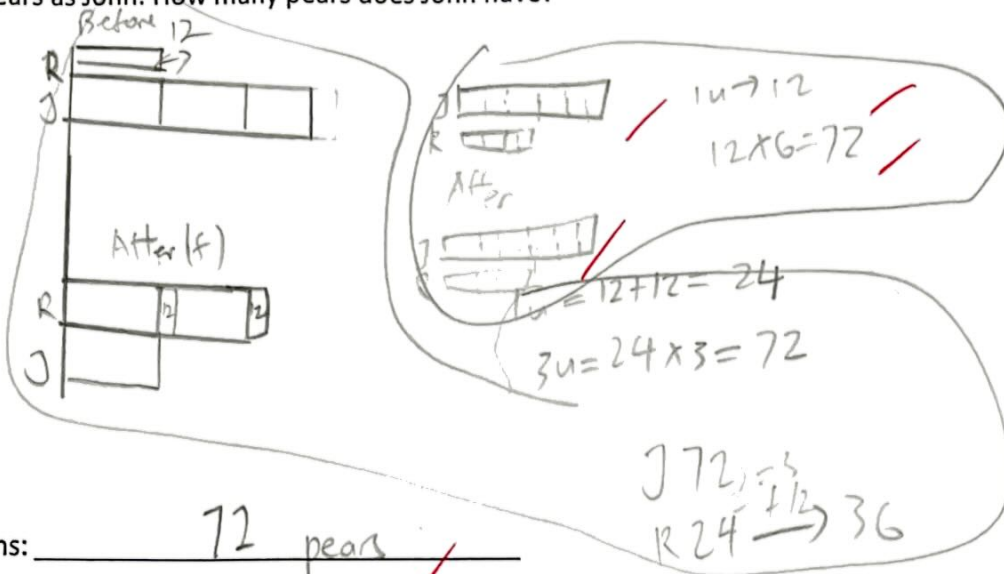
Name [redacted]

Date 5th June 2015

Teacher Mr. Lim

Q1. Practice

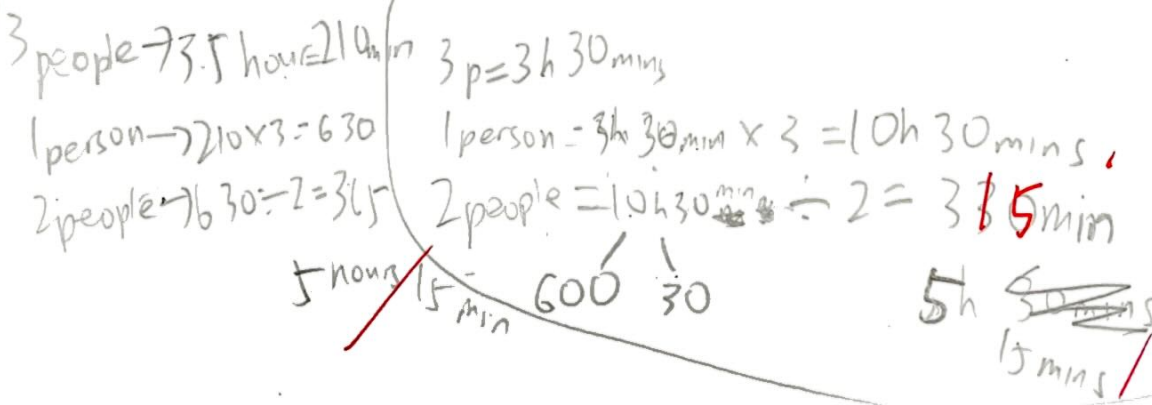
John has thrice as many pears as Ryan. If Ryan is given 12 pears, he will have half as many pears as John. How many pears does John have?



Ans: 72 pears

Q2. Practice

If it takes three people 3.5 hours to complete a job, how long would it take two people to complete the job?



Ans: 5h 15min

Q3. Practice

A toothpaste, three toothbrushes and a soap cost \$8 altogether. Two toothpastes and a toothbrush cost \$5 altogether. A soap and five toothbrushes cost \$8 altogether. How much does a soap cost?

Handwritten solution for Q3:

Diagram 1: A circle containing 1 Tp, 3 TB, and 1 S, labeled \$8.

Diagram 2: A circle containing 2 TP and 1 Tb, labeled \$5.

Diagram 3: A circle containing 1 S and 5 Tb, labeled \$8.

Equations:

$$1 \text{ Tp} = 2 \text{ Tb}$$

$$1 \text{ S} + 5 \text{ Tb} = \$8$$

$$1 \text{ S} + 5 + \text{Tp} = \$8$$

$$1 \text{ S} + 5 + 2 \text{ Tb} = \$8$$

$$1 \text{ S} + 5 + 2 \text{ Tb} - 5 = \$8 - 5$$

$$1 \text{ S} + 2 \text{ Tb} = \$3$$

Ans: \$3

Q4. Practice

In a pet shop, the number of cats was four times the number of dogs. After 15 dogs were sold, the number of cats became 7 times the number of dogs. How many cats were there at first?

Handwritten solution for Q4:

Before:

Diagram: A bar divided into 4 equal parts, each labeled 15.

After:

Diagram: A bar divided into 7 equal parts, each labeled 20.

Equations:

$$4u = 60$$

$$u = 60 \div 4 = 15$$

$$7u = 7 \times 15 = 105$$

Ans: 140

Q5. Practice

A tank can be filled by one pipe in 3 hours, and by another pipe in 4 hours. It can be emptied by a third pipe in 2 hours. If all three pipes are used together, how long will it take to fill the tank?

1 hour

12u

1st p = 4u
 (2nd p) = 3u
 (3rd p) = 6u

7u - 6u = 1u

1u = 1h
 12u = 12h

12h $\frac{1}{2}$ empty

Ans: _____

Q6. Practice

I have 25 more \$2 notes than \$10 notes. The difference between the value of my \$10 notes and \$2 notes is \$46. What is the total value of my \$2 notes?

\$2	\$10	diff
26	1	42
(52)	(10)	2-8
27	2	34
(54)	(20)	2-6
28	3	32
(56)	(30)	2-4
29	4	30
(58)	(40)	2-2
30	5	28
(60)	(50)	2-0
31	6	26
(62)	(60)	2-2
32	7	24
(64)	(70)	2-2
33	8	22
(66)	(80)	2-2
34	9	20
(68)	(90)	2-2
35	10	18
(70)	(100)	2-2
36	11	16
(72)	(110)	2-2
37	12	14
(74)	(120)	2-2

\$74

Ans: _____

$34 + 46 = 80$
 $80 \div 10 = 8$
 $120 - 76 = 44$

