

Mr. Svarc's Missing \$ Problem...REALLY???

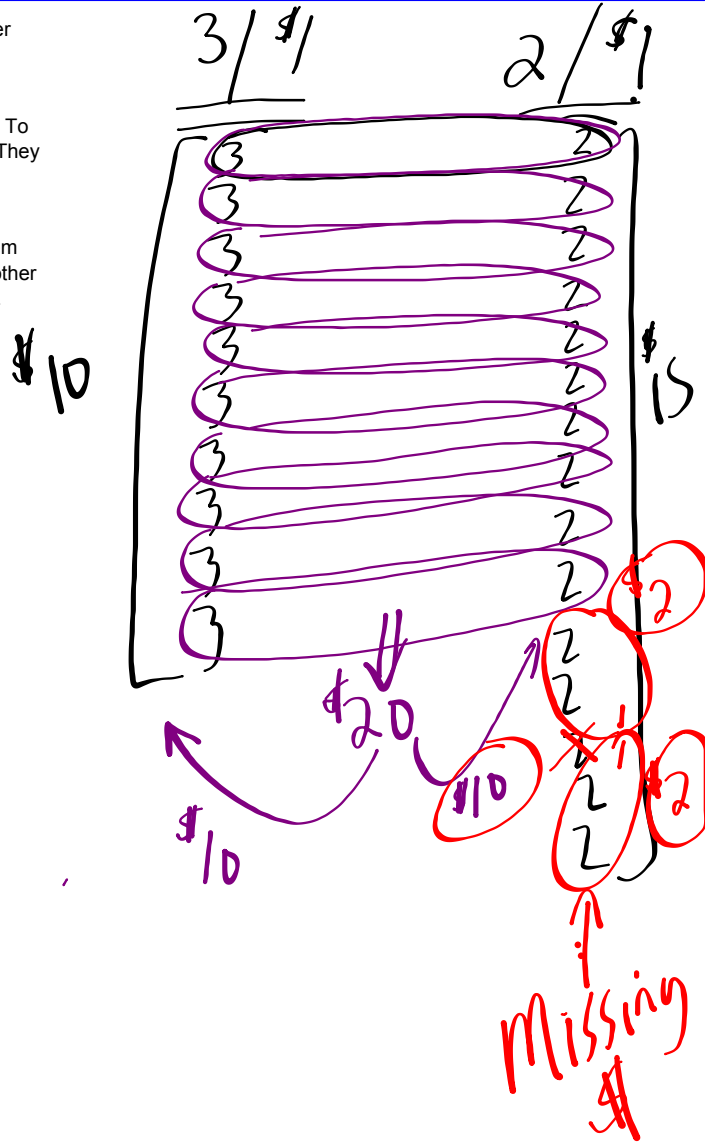
Two men were selling Atlantic Salmon Flies: one man sold 3 flies per dollar and the other man sold 2 flies per dollar.

One day they were both away so they each left 30 flies with a friend. To simplify the reckoning, the friend decided to sell 5 flies for 2 dollars. They sold them all and took in 24 dollars.

When it came to dividing up the sales between the owners...a problem arose. The one who had 30 flies at 3 for a dollar wanted \$10. The other who had 30 flies at 2 for a dollar wanted \$15. In total this made \$25.

The friend only made \$24 which means that they are a dollar short.

WHAT HAPPENED TO THE MISSING DOLLAR???



Old MacDonald's Last Wishes...

Old MacDonald had 17 cows. He died. His will said...

The first daughter Malia gets $\frac{1}{2}$ of the cows.

The second daughter Lainey gets $\frac{1}{3}$ of the cows.

The third daughter Janna gets $\frac{1}{9}$ of the cows.

The daughters could not figure out how to divide the cows.

Mr. Hallihan wanted to help so he loaned a cow to them.

Then the first daughter took $\frac{1}{2}$ of 18 cows = 9 cows.

The second daughter took $\frac{1}{3}$ of 18 or 6 cows.

The third daughter took $\frac{1}{9}$ of 18 or 2 cows.

That makes $9 + 6 + 2 = 17$ cows. So Mr. Hallihan took his cow back home.



Explain???

$$\frac{2}{2 \cdot 9} + \frac{6}{6 \cdot 3} + \frac{9}{9 \cdot 2}$$

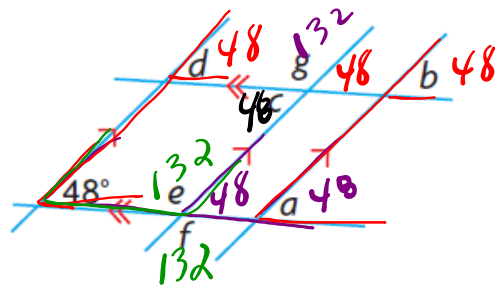
$$\frac{17}{18} + \text{extra cow}$$

Homework...

p. 72: #2

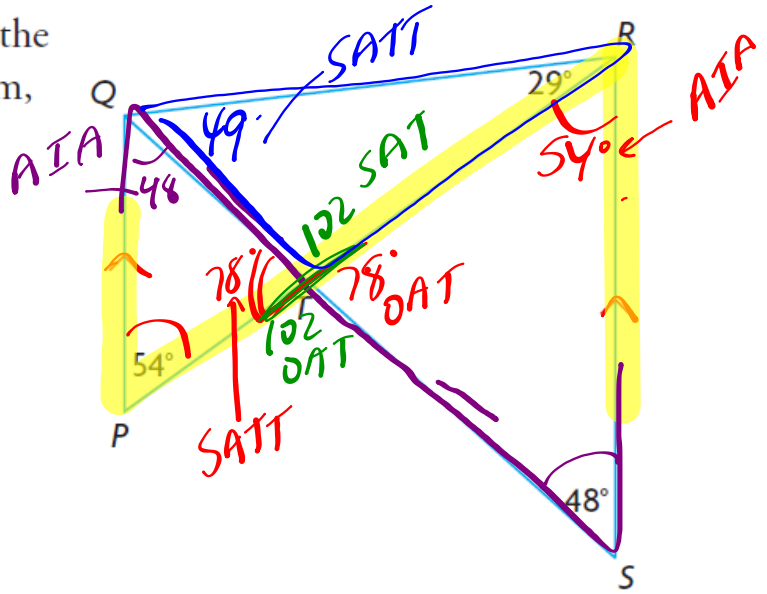
p. 78: #1, 4, 15

4c) c)



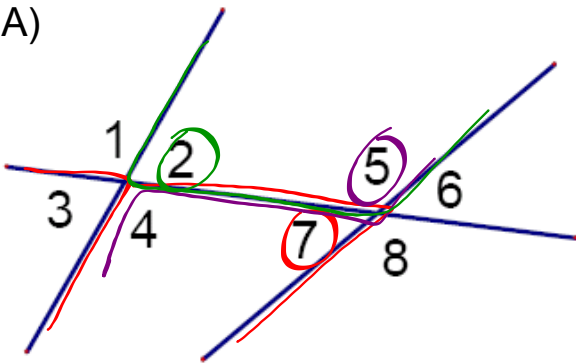
15. Determine the measures of all the unknown angles in this diagram, given $PQ \parallel RS$.

↑
parallel
//



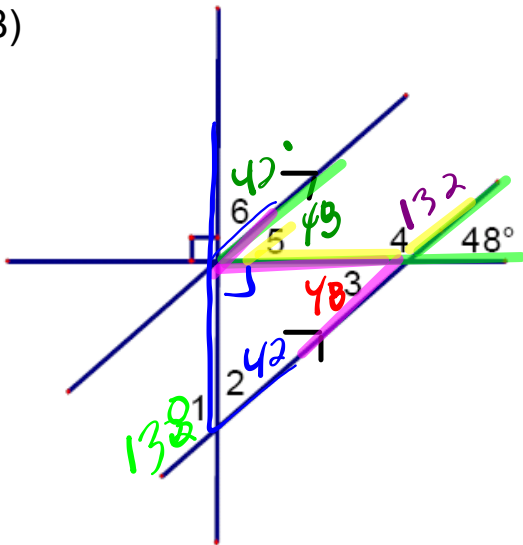
EXERCISE: Practice...

A)



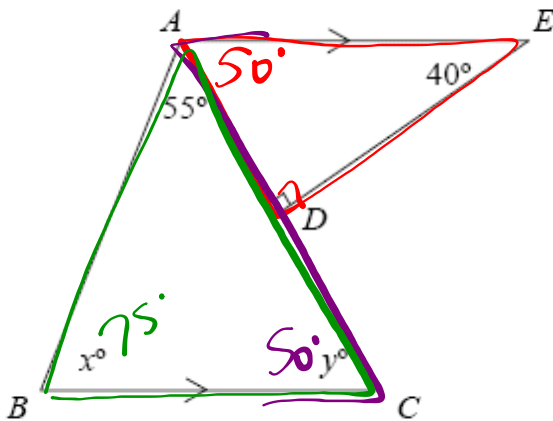
1. $\angle 3$ and $\angle 7$ are corresponding angles. "F"
2. $\angle 4$ and $\angle 5$ are alternate interior angles. "Z"
3. $\angle 5$ and $\angle 2$ are same-side interior angles. "C"
co-interior

B)



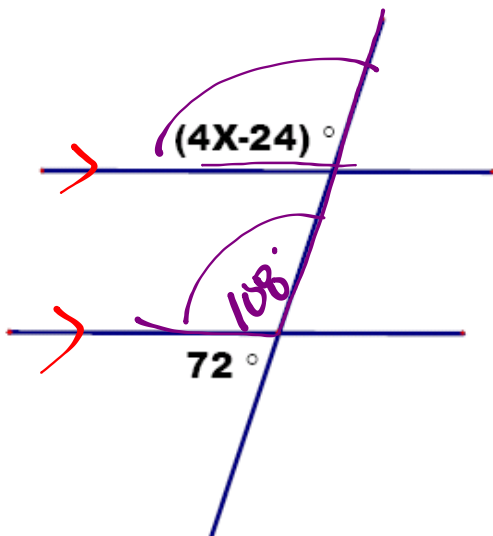
1. $m\angle 1 = 132$ SAT
2. $m\angle 2 = 42$ CA
3. $m\angle 3 = 48^\circ$ OAT
4. $m\angle 4 = 132$ SAT
5. $m\angle 5 = 48$ CA
6. $m\angle 6 = 42$ CAT

C)



Find x° and y° .

D)



$x =$ _____

$$4x - 24 = 108$$

$$4x = 108 + 24$$

$$4x = 132$$

$$x = 33$$

EXAMPLE 3

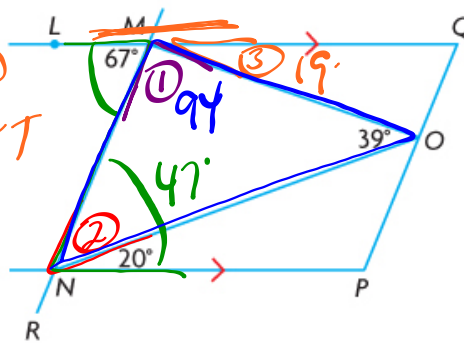
Using reasoning to solve problems

JUSTIFY!!!

Determine the measures of $\angle NMO$, $\angle MNO$, and $\angle QMO$.

SAT AIA
↓
Subtract

SAT



Tyler's Solution

MN is a transversal of parallel lines LQ and NP .

MN intersects parallel lines LQ and NP .

$$\begin{aligned} \angle MNO + 20^\circ &= 67^\circ \\ \angle MNO &= 47^\circ \end{aligned}$$

Since $\angle LMN$ and $\angle MNP$ are alternate interior angles between parallel lines, they are equal.

$$\begin{aligned} \angle NMO + \angle MNO + 39^\circ &= 180^\circ \\ \angle NMO + (47^\circ) + 39^\circ &= 180^\circ \\ \angle NMO + 86^\circ &= 180^\circ \\ \angle NMO &= 94^\circ \end{aligned}$$

The measures of the angles in a triangle add to 180° .

$$\begin{aligned} \angle NMO + \angle QMO + 67^\circ &= 180^\circ \\ (94^\circ) + \angle QMO + 67^\circ &= 180^\circ \\ 161^\circ + \angle QMO &= 180^\circ \\ \angle QMO &= 19^\circ \end{aligned}$$

$\angle LMN$, $\angle NMO$, and $\angle QMO$ form a straight line, so their measures must add to 180° .

The measures of the angles are:

$$\angle MNO = 47^\circ; \angle NMO = 94^\circ; \angle QMO = 19^\circ.$$

HOMEWORK...

1) Assignment - Angle Properties (DUE MONDAY)

~~X~~ 2) Quiz

Chp 1 → Practice Ques
Practice Test
F A Q

Attachments

Assignment - Angle Properties.pdf