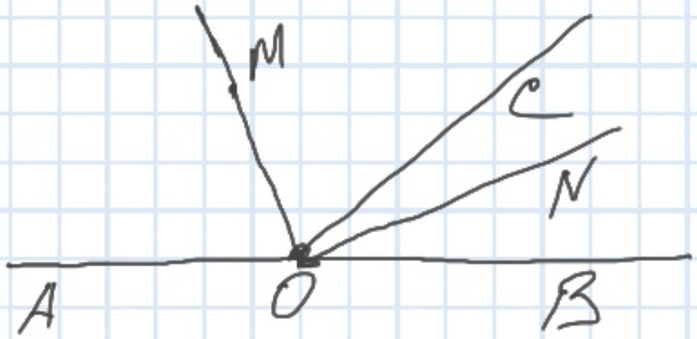
HW 14.

#1.



$\angle AOC + \angle COB = 180°$.

$\angle AOM = \angle MOC$

$\angle CON = \angle NOB$.

$\angle MOC + \angle CON = \frac{1}{2}\angle AOC + \frac{1}{2}\angle COB$

$= \frac{1}{2}(\angle AOC + \angle COB) = \frac{1}{2} \cdot 180° = 90°$.

#2.

$2 + 3 = 5$.

$180 : 5 = 36$.

One angle is $36 \cdot 2 = 72$

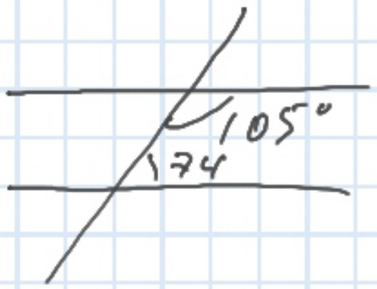
Another is $36 \cdot 3 = 108$.

#3.

a. $\angle AOB + \angle BOC = 137^\circ + 43^\circ = 180^\circ$ yes.

b. $\angle AOB + \angle BOC = 65^\circ + 116^\circ = 181^\circ$ NO.

#4.



$105 + 174 = 279$. NO, lines are not parallel.

#5. $V = M + O$. 0.46 V like T.

$0.46V = M + 0.1O$.

$O = V - M$.

$0.46V = M + 0.1V - 0.1M = 0.9M + 0.1V$

$0.46V - 0.1V = 0.9M$

$0.36V = 0.9M$.

$M = \frac{0.36}{0.9} V = 0.4V$

or 40%

№6.

$$\left(2.5-0.75\right)\cdot\frac{4}{7}+\left(\left(3\frac{3}{8}-2\frac{11}{12}\right)\cdot 1\frac{7}{9}+2\frac{11}{12}\cdot 1\frac{7}{9}\right):\left(3.5:2\frac{1}{3}\right),$$

1. $3.5:2\frac{1}{3}=\frac{35}{10}:\frac{7}{3}=\frac{7}{2}:\frac{7}{3}=\frac{7}{2}\cdot\frac{3}{7}=\frac{3}{2}$

2. $\left(3\frac{3}{8}-2\frac{11}{12}\right)\cdot 1\frac{7}{9}+2\frac{11}{12}\cdot 1\frac{7}{9}=1\frac{7}{9}\left(3\frac{3}{8}-2\frac{11}{12}+2\frac{11}{12}\right)=$

$$=1\frac{7}{9}\cdot 3\frac{3}{8}=\frac{16}{9}\cdot\frac{27}{8}=\frac{8\cdot 2\cdot 3\cdot 9}{9\cdot 8}=6.$$

3. $\left(2.5-0.75\right)\cdot\frac{4}{7}=1.75\cdot\frac{4}{7}=1\frac{3}{4}\cdot\frac{4}{7}=\frac{7}{4}\cdot\frac{4}{7}=1.$

4. $1+6:\frac{3}{2}=1+6\cdot\frac{2}{3}=1+4=5.$