Section 8.4
p. 348: 6, 8, 10, 12, 14, 18, 20
\#6 Given: $\overline{w z \|} \| \overline{x y}$ conc: $w s \cdot x y=x s \cdot w z$


1. $\overline{w z} \| \overline{X Y}$
2. $\measuredangle S W Z \cong \nsubseteq S X Y$
3. $\Varangle S Z W \cong \Varangle S Y X$
4. $\triangle S W Z \sim \triangle S X Y$
5. $\frac{s w}{s x}=\frac{w z}{x y}$
6. $\overline{s w} \cdot \overline{x y}=\overline{s x} \cdot w z$
7. Given
8. If II lines $\rightarrow$ corr. \&is $\cong$
3."
9. $A A \sim$
10. CSSTP
11. Means Extremes product The
\#8 Given: GJKL~MOPR Find: $O P, P R$, and $M R$

$$
\begin{array}{ll}
\frac{9}{6}=\frac{3}{2} & \\
\frac{3}{2}=\frac{12}{O P} & \frac{3}{2}=\frac{6}{R P} \\
3 O P=24 & 3 R P=12 \\
O P=8 & R P=4
\end{array}
$$



$$
\frac{3}{2}=\frac{e}{M R} J
$$

\#10 If 2 similar kites have perimeters of 21 and 28 , what is the ratio of the measures of 2 corr sides

$$
\frac{21}{28}=\frac{3}{4}
$$

\#12 Given: $\square$ ACEG w/ F the midpt of EG

$$
\triangle A B H \cong \triangle E F D
$$

Prove: $A B \cdot F D=H B \cdot G F$

1. $\square$ ACE $w / F$ the midpt of $\overline{E G}$
2. $\triangle A B H \cong \triangle E F D$
$3 \nleftarrow A \cong \not \subset E \leftarrow \triangle A B H \sim \triangle E F D$ (AA)
3. $\frac{A B}{F E}=\frac{H B}{F D}$
4. $A B \cdot F D=H B \cdot F E$
5. $\overline{F E} \cong \overline{G F}$
6. $A B \cdot F D=H B \cdot G F$

7. Given
8. Given
9. If $\square \rightarrow$ opp. $\boldsymbol{\alpha}$ is $\stackrel{N}{=}$
10. CSSTP
11. Means extremes Th $m$
12. If a pt is a midpt $\rightarrow$ divides the seginto $2 \cong$ segs
13. Substitution
\#14 Find the coordinates of point $P$ in the diagram $\underset{(-6,0)}{(0,8)} \quad m=\frac{8-0}{0+6}=\frac{8}{6}=\frac{4}{3}$
$\begin{array}{ll}(0, y) \\ (-9,0)\end{array} \quad \frac{y-0}{0+9}=\frac{4}{3}$
$(0,12)$

$$
\begin{aligned}
& \frac{y}{9}=\frac{4}{3} \\
& 3 y=36 \\
& y=12
\end{aligned}
$$


\#18 if $\triangle T V K \sim \Delta \times 2 Y$

$$
\begin{aligned}
& T V=8 \\
& V K=9 \\
& T K=10 \\
& Z Y=4
\end{aligned}
$$



Find: $X Y$

$$
\begin{aligned}
& \frac{9}{4}=\frac{10}{x y} \\
& \frac{9 x y}{9}=\frac{40}{9} \\
& x y=\frac{40}{9}=4 \frac{4}{9}
\end{aligned}
$$



