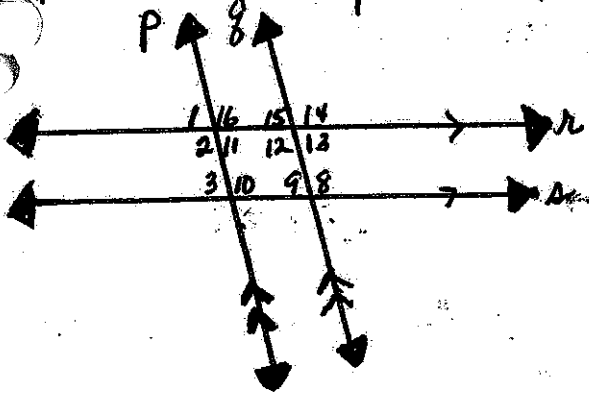


Math 1 Chapter 11 Review #1 Name Key



- 1) $\angle 3$ and $\angle 9$ are what kind of angles?
Corresponding
- 2) $\angle 15$ and what angle are alternate interior angles?
 $\angle 11$
- 3) $\angle 10$ and $\angle 9$ are what kind of angles?
Same Side Interior

4.) Which angle could you show is Congruent to $\angle 9$ to prove $p \parallel q$?
 $\angle 3$ Corresponding $\angle s \cong$

5.) What relationship between $\angle 12$ and $\angle 8$ to prove $l \parallel m$?
 \cong Alternate Interior $\angle s \cong$

6.) Which angle corresponds to $\angle 2$?
 $\angle 12$

7.) $\angle 1$ and what angle are alternate exterior $\angle s$?
 $\angle 13$

8.) If $m\angle 5 = 48$, then find $m\angle 11$.
 $\angle 5 \cong \angle 11$ (AI $\angle s \cong$)
 $m\angle 11 = 48^\circ$

9.) If $m\angle 16 = 124$, then find $m\angle 15$.
 $m\angle 16 + m\angle 15 = 180$ (SSI $\angle s$ supp)
 $124 + m\angle 15 = 180$
 -124
 $m\angle 15 = 56$

10.) If $\angle 1 = 72^\circ$, then $m\angle 8$ is what?
 $\angle 1 \cong \angle 8$ (AE $\angle s \cong$)
 $m\angle 8 = 72^\circ$

11.) If $m\angle 14 = 125$, then $\angle 9$ is what.
 $\angle 14 \cong \angle 8$ (C $\angle s \cong$)
 $\angle 8 + \angle 9 = 180$ (linear pair supp)
 $125 + \angle 9 = 180$
 -125
 $\angle 9 = 55^\circ$

Find the values of the variables.

12.)

$b \parallel c$
 $(2x - 22)^\circ$
 118°
AE $\angle s \cong$

$$\begin{array}{r} 2x - 22 = 118 \\ +22 \quad +22 \\ \hline 2x = 140 \\ \hline x = 70 \end{array}$$

13.)

11°
 127°
 x
 6°
 z
 y

$$\begin{array}{r} x + 11 + 127 = 180 \\ x + 138 = 180 \\ -138 \quad -138 \\ \hline x = 42 \end{array}$$

$$\begin{array}{r} 42 + y = 180 \\ -42 \quad -42 \\ \hline y = 138 \end{array}$$

$$\begin{array}{r} 6 + z + 138 = 180 \\ z + 144 = 180 \\ -144 \quad -144 \\ \hline z = 36 \end{array}$$

14.)

$l \parallel m$
 1
 $(5x + 12)^\circ$
 $(2x + 14)^\circ$
 $5x + 12$
vert. $\angle s \cong$
SSI $\angle s$ supp

$$\begin{array}{r} 2x + 14 + 5x + 12 = 180 \\ 7x + 26 = 180 \\ -26 \quad -26 \\ \hline 7x = 154 \\ \hline x = 22 \end{array}$$

15.)

$(3x)^\circ$
 90°
 $(4x - 1)^\circ$

$$3x + 90 + 4x - 1 = 180 \rightarrow x = 91$$

16.)

22°
 19°
 x
 y
 z

$$\begin{array}{r} 22 + 104 + x = 180 \\ 126 + x = 180 \\ -126 \quad -126 \\ \hline x = 54 \end{array}$$

$$\begin{array}{r} 54 + y = 180 \\ -54 \quad -54 \\ \hline y = 126 \end{array}$$

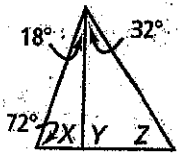
$$\begin{array}{r} 19 + z + 126 = 180 \\ z + 145 = 180 \\ -145 \quad -145 \\ \hline z = 35 \end{array}$$

17.)

$d \parallel e$
 $(7x + 3)^\circ$
 $(2x - 3)^\circ$
 q
SSI $\angle s$
supp

$$\begin{array}{r} 7x + 3 + 2x - 3 = 180 \\ 9x = 180 \\ \hline x = 20 \end{array}$$

18)



$$72 + x + 18 = 180$$

$$\begin{array}{r} 90 + x = 180 \\ -90 \quad -90 \\ \hline \end{array}$$

$$\boxed{x = 90}$$

$$\begin{array}{r} 90 + y = 180 \\ -90 \quad -90 \\ \hline \end{array}$$

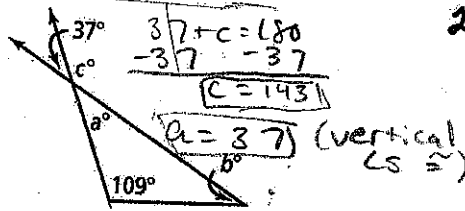
$$\boxed{y = 90}$$

$$32 + 90 + z = 180$$

$$\begin{array}{r} 122 + z = 180 \\ -122 \quad -122 \\ \hline \end{array}$$

$$\boxed{z = 58}$$

19)



$$\begin{array}{r} 37 + c = 180 \\ -37 \quad -37 \\ \hline \end{array}$$

$$\boxed{c = 143}$$

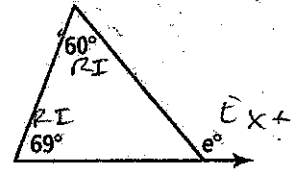
$a = 37$ (vertical \angle s \cong)

$$37 + 109 + b = 180$$

$$\begin{array}{r} 146 + b = 180 \\ -146 \quad -146 \\ \hline \end{array}$$

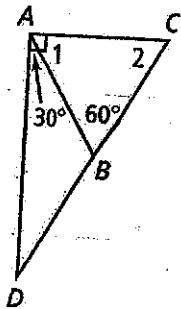
$$\boxed{b = 34}$$

20)



$$e = 69 + 60 = \boxed{129}$$

21)



$$\begin{array}{r} \angle 1 + 30 = 90 \\ -30 \quad -30 \\ \hline \end{array}$$

$$\boxed{\angle 1 = 60}$$

$$60 + 60 + \angle 2 = 180$$

$$\begin{array}{r} 120 + \angle 2 = 180 \\ -120 \quad -120 \\ \hline \end{array}$$

$$\boxed{\angle 2 = 60}$$

22)

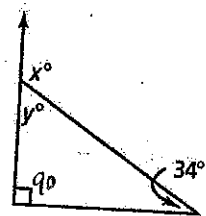


$$33 + 28 + \angle 1 = 180$$

$$\begin{array}{r} 61 + \angle 1 = 180 \\ -61 \quad -61 \\ \hline \end{array}$$

$$\boxed{\angle 1 = 119}$$

23)



$$90 + 34 + y = 180$$

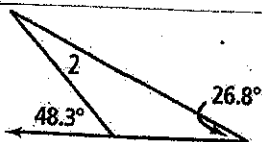
$$\begin{array}{r} 124 + y = 180 \\ -124 \quad -124 \\ \hline \end{array}$$

$$\boxed{y = 56}$$

$$\begin{array}{r} x + 56 = 180 \\ -56 \quad -56 \\ \hline \end{array}$$

$$\boxed{x = 124}$$

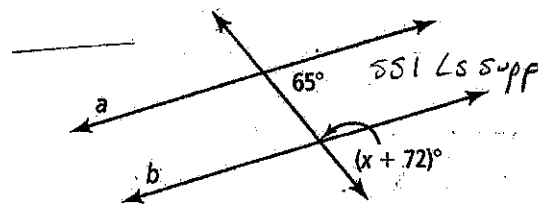
24)



$$\begin{array}{r} 48.3 = \angle 2 + 26.8 \\ -26.8 \quad -26.8 \\ \hline \end{array}$$

$$\boxed{21.5 = \angle 2}$$

25.) Find the value of x for which $a \parallel b$.

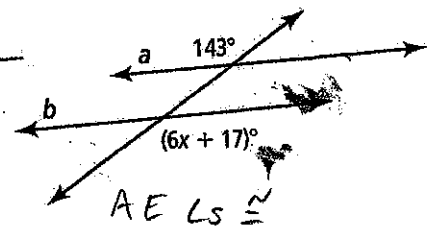


$$65 + x + 72 = 180$$

$$\begin{array}{r} 137 + x = 180 \\ -137 \quad -137 \\ \hline \end{array}$$

$$\boxed{x = 43}$$

26)



$$\begin{array}{r} 143 = 6x + 17 \\ -17 \quad -17 \\ \hline \end{array}$$

$$\begin{array}{r} 126 = 6x \\ \underline{\quad} \quad \underline{\quad} \\ 6 \quad 6 \end{array}$$

$$\boxed{21 = x}$$