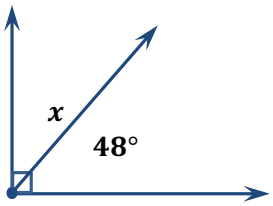
Name: _____ Period: _____ Date: _____

Measuring Angles Exit Quiz

Multiple choices

1. Find the value of x in the figure below.



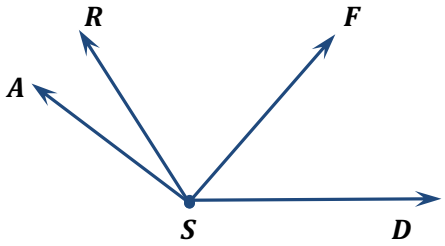
a. $42°$

b. $132°$

c. $32°$

d. $90°$

2. Which of the following statements is true?



a. $\angle DSA \text{ and} \angle DSF$ are obtuse angles

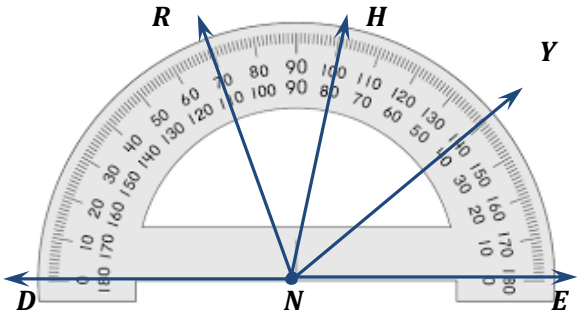
b. $\angle DSF \text{ and} \angle RSA$ are acute angles

c. $\angle FSA \text{ and} \angle DSR$ are obtuse angles

d. $\angle RSA \text{ and} \angle DSR$ are acute angles

3. Find the measure of each angle.

$m\angle ENH, m\angle YNH, m\angle HNR = ?$

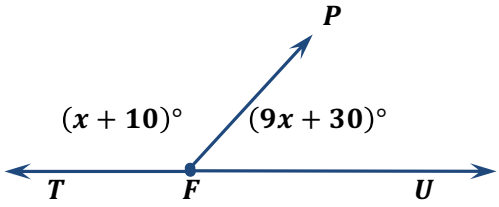


Name: _____ Period: _____ Date: _____

Measuring Angles Exit Quiz

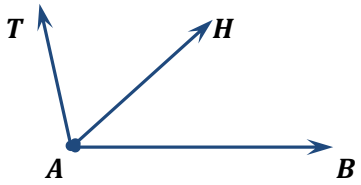
4. Find the value of x and then the indicated angle measures.

If $m\angle UFP = 9x + 30$, $m\angle PFT = x + 10$, what are $m\angle UFP$ and $m\angle PFT$?



5. Find the indicated angle measures.

If $\overrightarrow{AN}$ bisects $\angle BAT$ and $m\angle BAT = 126$, find $m\angle BAH$ and $m\angle BAH$.



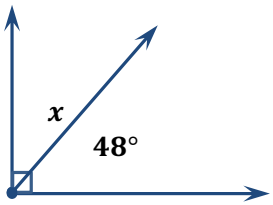
Name: _____ Period: _____ Date: _____

Measuring Angles Exit Quiz

ANSWERS

Multiple choices

1. **Find the value of x in the figure below.**



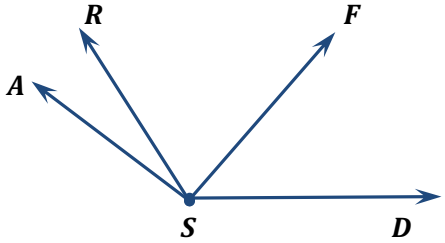
a. $42°$

b. $132°$

c. $32°$

d. $90°$

2. **Which of the following statements is true?**



a. $\angle DSA \text{ and} \angle DSF$ are obtuse angles

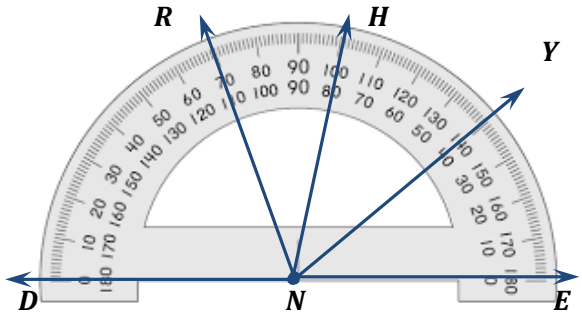
b. $\angle DSF \text{ and} \angle RSA$ are acute angles

c. $\angle FSA \text{ and} \angle DSR$ are obtuse angles

d. $\angle RSA \text{ and} \angle DSR$ are acute angles

3. Find the measure of each angle.

$m\angle ENH, m\angle YNH, m\angle HNR = ?$



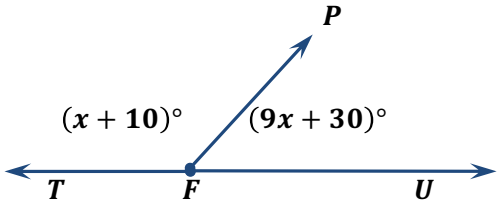
$m\angle ENH = 100$
Obtuse angle
$m\angle YNH = |140 - 100| = 40$
Acute angle
$m\angle HNR = |100 - 70| = 30$
Acute angle

Name: _____ Period: _____ Date: _____

Measuring Angles Exit Quiz

4. Find the value of x and then the indicated angle measures.

If $m\angle UFP = 9x + 30$, $m\angle PFT = x + 10$, what are $m\angle UFP$ and $m\angle PFT$?



$m\angle UFP = 9x + 30$,
$m\angle PFT = x + 10$
$m\angle UFP = ?$ $m\angle PFT = ?$

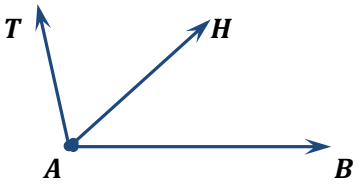
$m\angle UFT = m\angle UFP + m\angle PFT$
$180 = 9x + 30 + x + 10$
$180 = 10x + 40$
$180 - 40 = 10x + 40 - 40$
$140 = 10x$
$x = 14$

$m\angle UFP = 9x + 30$
$m\angle UFP = 9 * 14 + 30$
$m\angle UFP = 126 + 30$
$m\angle UFP = 156$

$m\angle PFT = x + 10$
$m\angle PFT = 14 + 10$
$m\angle PFT = 24$

5. Find the indicated angle measures.

If $\overrightarrow{AN}$ bisects $\angle BAT$ and $m\angle BAT = 126$, find $m\angle BAH$ and $m\angle BAH$.



$m\angle BAT = 126$
$m\angle BAH = ?$ $m\angle HAT = ?$

$m\angle BAT = m\angle BAH + m\angle HAT$
$m\angle BAH = m\angle HAT$
$m\angle BAT = 2 * m\angle BAH$
$m\angle BAH = \frac{m\angle BAT}{2}$
$m\angle BAH = \frac{126}{2}$
$m\angle BAH = 63$
$m\angle HAT = m\angle BAH$
$m\angle HAT = 63$