Geom

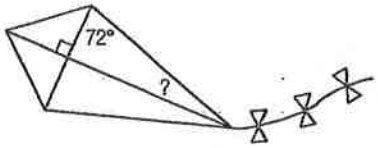
NAME _____ DATE _____ PERIOD ____

4-2 HW

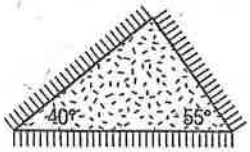
Practice

Angles of Triangles

Find the missing angle measures.

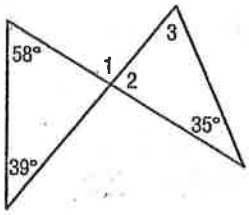
1. 

18°

2. 

85°

Find the measure of each angle.

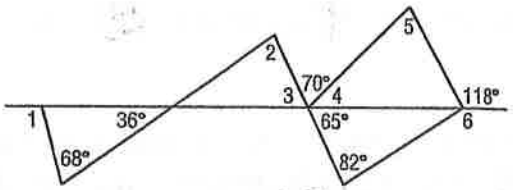


3. $m\angle 1$ 97°

4. $m\angle 2$ 83°

5. $m\angle 3$ 62°

Find the measure of each angle.



6. $m\angle 1$ 104°

7. $m\angle 4$ 45°

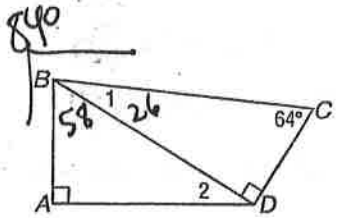
8. $m\angle 3$ 65°

9. $m\angle 2$ 79°

10. $m\angle 5$ 73°

11. $m\angle 6$ 147°

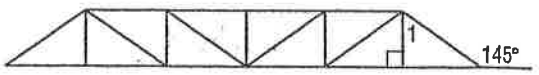
Find the measure of each angle if $\angle BAD$ and $\angle BDC$ are right angles and $m\angle ABC = 84$.



12. $m\angle 1$ 26°

13. $m\angle 2$ 32°

14. **CONSTRUCTION** The diagram shows an example of the Pratt Truss used in bridge construction. Use the diagram to find $m\angle 1$.



55°

Homework

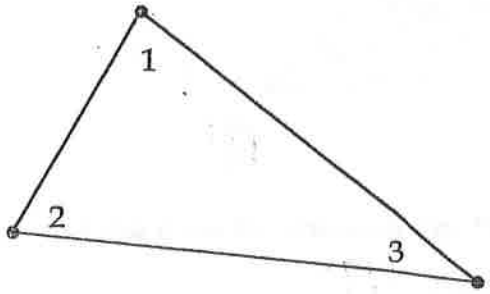
1. If $m\angle 1 = 28°$ and $m\angle 2 = 67°$, find $m\angle 3$. 85

2. If $m\angle 1 = 107°$ and $m\angle 3 = 37°$, find $m\angle 2$. 36

3. If $m\angle 2 = 34°$ and $m\angle 3 = 67°$, find $m\angle 1$. 79

4. If $m\angle 1 = 16°$ and $m\angle 2 = 35°$, find $m\angle 3$. 129

5. If $m\angle 3 = 88°$ and $m\angle 2 = 47°$, find $m\angle 1$. 45°



6. If $m\angle 1 = x + 30$, $m\angle 2 = x - 23$ and $m\angle 3 = 2x - 7$, find x and the value of each numbered angle.
x = 45, m<1 = 75, m<2 = 22, m<3 = 83 $4x = 180$

7. If $m\angle 1 = 9x$, $m\angle 2 = 2x$ and $m\angle 3 = 7x$, find x and the value of each numbered angle.
x = 10, m<1 = 90, m<2 = 20, m<3 = 70

8. If $m\angle 1 = 3x + 20$, $m\angle 2 = 2x - 25$ and $m\angle 3 = 5x + 10$, find x and the value of each numbered angle.
x = 17.5, m<1 = 72.5, m<2 = 10, m<3 = 97.5
$10x + 5 = 180$
$10x = 175$ $x = 17.5$

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9. If m<1=72° and m<3=25°, then m<5= 97°.

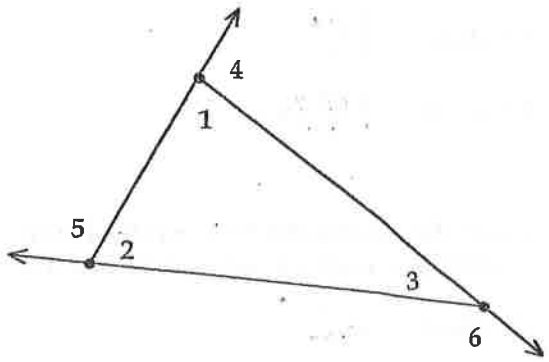
10. If m<2=61° and m<3=21°, then m<4= 82°.

11. If m<1=80° and m<2=73°, then m<6= 153°

12. If m<4=103° and m<3=18°, then m<2= 85°.

13. If m<5=99° and m<3=32°, then m<1= 67°.

14. If m<2= x+10 , m<3=x and m<4=100°, then x = 45.



$2x + 10 = 100$
$2x = 90$
$x = 45$