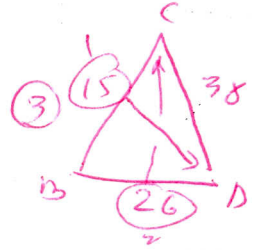
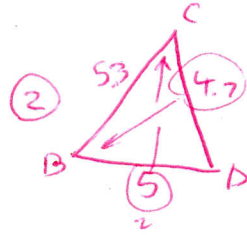
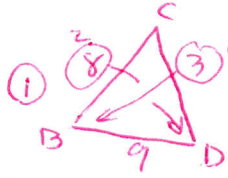


✓ Checkpoint Quiz Ch 5

List the angles of $\triangle BCD$ from smallest to largest.

- $BC = 8, CD = 3, BD = 9$ $\angle B, \angle D, \angle C$
- $BC = 5.3, CD = 4.7, BD = 5$ $\angle B, \angle C, \angle D$
- $BC = 15, CD = 38, BD = 26$ $\angle D, \angle C, \angle B$



4. Alicia was making triangles with sticks. If she has a 5-ft stick and a 4-ft stick, which stick can she not use to form a triangle?

A. 9-ft stick

$$\begin{array}{r} 5, 4, 9 \\ 5+4 > 9 \end{array}$$

B. 6-ft stick

$$\begin{array}{r} 5, 4, 6 \\ 5+4 > 6 \\ 5+6 > 4 \\ 4+6 > 5 \end{array}$$

C. 5-ft stick

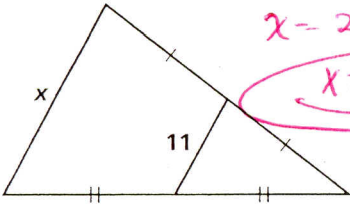
$$\begin{array}{r} 5, 4, 5 \\ 5+4 > 5 \\ 4+5 > 5 \\ 5+5 > 4 \end{array}$$

D. 4-ft stick

$$\begin{array}{r} 5, 4, 4 \\ 5+4 > 4 \\ 4+4 > 5 \\ 4+5 > 4 \end{array}$$

Find the value of x .

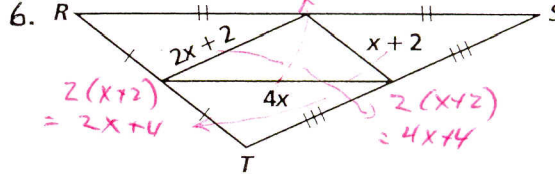
5.



$$x = 2 \cdot 11$$

$$x = 22$$

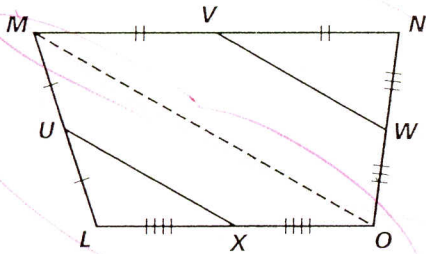
6.



Perimeter of $\triangle RST = 50$

$$\begin{aligned} 8x + (4x+4) + (2x+4) &= 50 \\ 14x + 8 &= 50 \\ 14x &= 42 \\ x &= 3 \end{aligned}$$

7. What can you conclude from the diagram below?



① $\overline{UV} \parallel \overline{MO}$

② $\overline{UX} \parallel \overline{MO}$

$2UV = MO$

$2UX = MO$

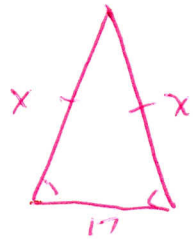
$\overline{UV} \parallel \overline{UX}$

$UV = UX$

Stating that $\overline{UV} \parallel \overline{UX}$ are \triangle midsegments is obvious, look deeper...

8. The base of an isosceles triangle has a length of 17. What can you say about the length of the legs?

It is obvious that the legs are \cong , that is the defn of isos. \triangle . There is more you can say...



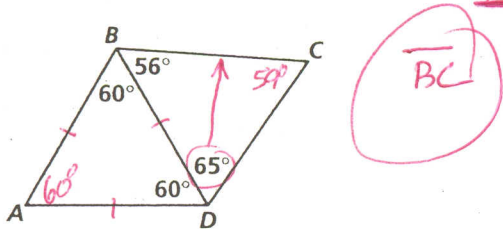
$$x + x > 17$$

$$2x > 17$$

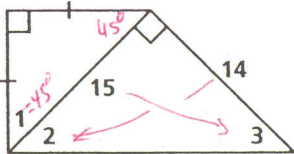
$$x > 8.5$$

✓ Checkpoint Quiz Ch 5

9. In the figure below, which segment is the longest?



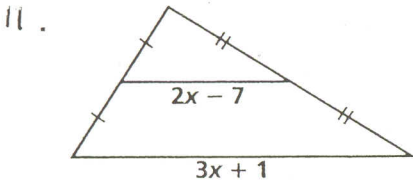
10. In the figure below, put the three numbered angles in order from greatest to least.



$m\angle 3 > m\angle 2$
 $m\angle 2 + m\angle 3 = 90$, so $m\angle 3 > 45^\circ$ and $m\angle 2 < 45^\circ$
 $m\angle 1 = 45^\circ$

$\angle 3, \angle 1, \angle 2$
 ($>45^\circ$), ($=45^\circ$), ($<45^\circ$)

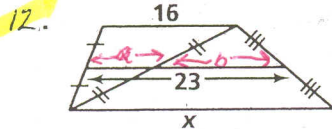
Find the value of x.



$$2(2x - 7) = 3x + 1$$

$$4x - 14 = 3x + 1$$

$$x = 15$$

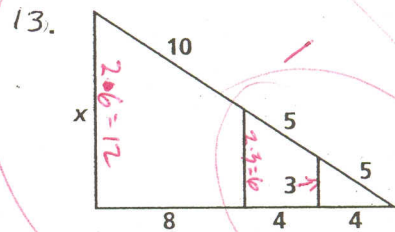


$$a = \frac{16}{2} = 8$$

$$b = 23 - 8 = 15$$

$$x = 2 \cdot 6 = 30$$

$$x = 30$$



$$x = 12$$

Find the center of the circle that circumscribes each $\triangle ABC$.

14. $A(0, 3), B(0, 7), C(10, 7)$

15. $A(3, -5), B(3, 9), C(-17, -5)$

