

Geometry Chapter 8 Review

1.) Find the sum of the measures of the interior angles of a regular 32-gon.

$$S = 180(n-2)$$

$$S = 180(32-2)$$

$$S = 180(30)$$

$$S = 5400$$

2.) Use the parallelogram ABCD to find angle BCD.

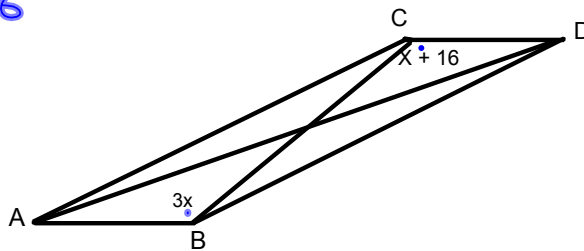
$$3x = x + 16$$

$$\begin{array}{r} -x \quad -x \\ \hline 2x = 16 \\ x = 8 \end{array}$$

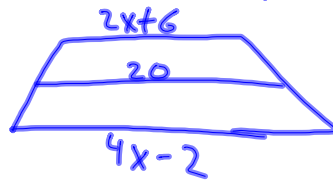
$$\angle BCD = x + 16$$

$$= 8 + 16$$

$$\angle BCD = 240$$



3.) The length of the median of a trapezoid is 20 feet. If the bases have lengths $2x+6$ and $4x-2$, find x



$$\frac{2x+6+4x-2}{2} = \frac{20}{1}$$

$$\frac{6x+4}{2} \times \frac{20}{1}$$

$$6x+4 = 2(20)$$

$$6x+4 = 40$$

$$\begin{array}{r} 6x+4 \\ -4 \quad -4 \\ \hline 6x=36 \end{array}$$

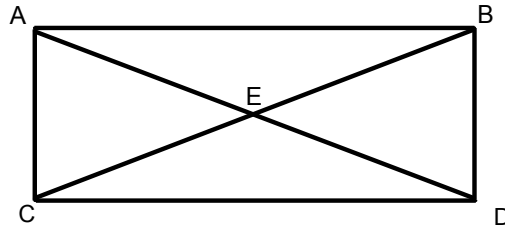
$$\frac{6x}{6} = \frac{36}{6}$$

$$x=6$$

Practice test
Homework
 skip 10, 11, 16, 17, 18

4.) Find the measure of each exterior angle of a regular 40-gon.

5.) ABCD is a rectangle. If angle CBA = $3x + 2$ and angle BCD = $9x - 16$, Find angle CBD.



6.) FOIL the following: $(6x + 2)(2x - 9)$

Factor the following: $x^2 + 6x - 27$

7.) Given the rectangle EFGH, find x , then find angles 1, 2, 3, and 4.

