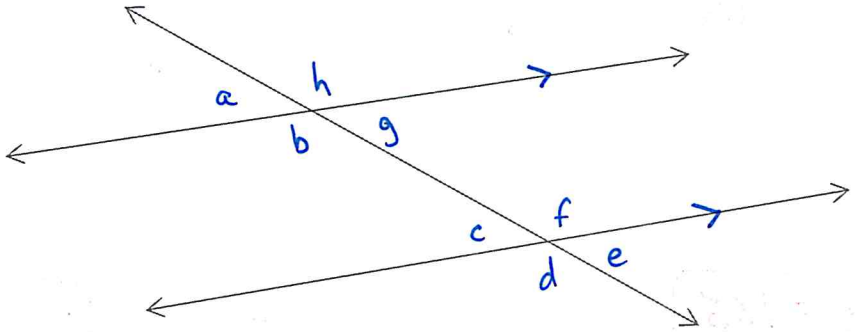
Geometry

Emphasis on Parallel Lines



Identify each of the following:

1. List all the pairs of Corresponding Angles.

a ≅ c , b ≅ d, h ≅ f, g ≅ e

2. List all the pairs of Alternate Interior Angles.

b ≅ f g ≅ c

3. List all the pairs of Alternate Exterior Angles.

a ≅ e d ≅ h

4. List the Same-Side Interior Angles.

b ≅ c g ≅ f

5. List all of the Vertical Angles.

a ≅ g h ≅ b c ≅ e f ≅ d

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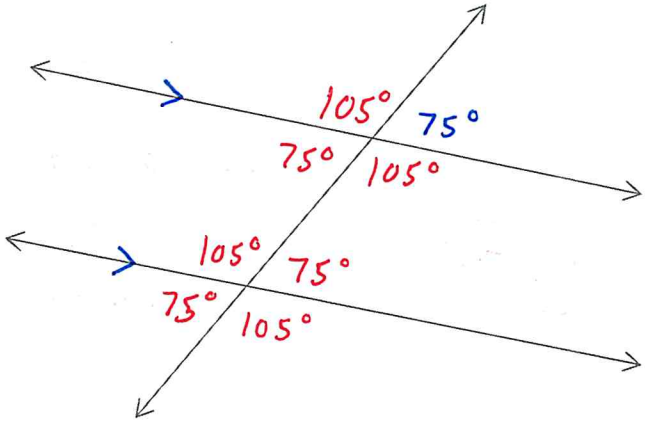
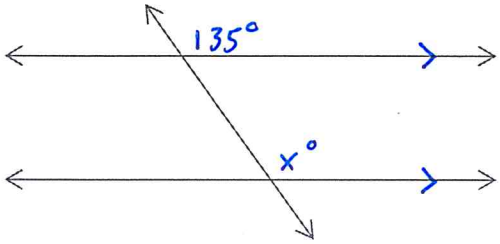
6. Find the measure of each of the missing angles.



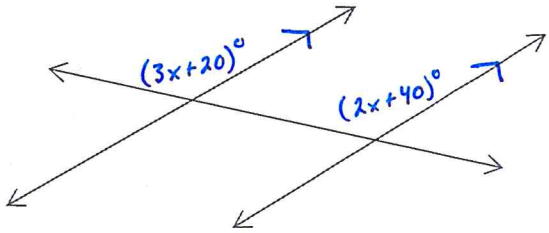
Find the value of each variable:

7.



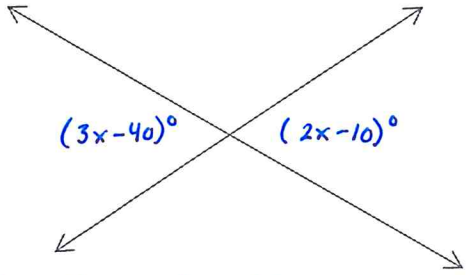
$X = 135$

8.



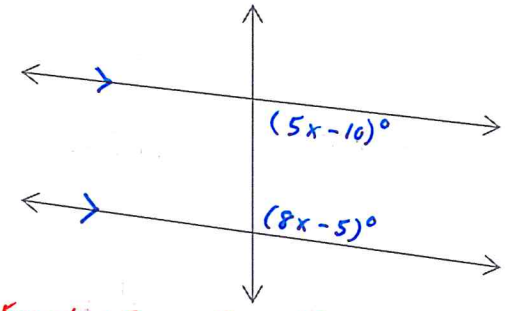
$3x + 20 = 2x + 40$
$-2x \quad -2x$
$x + 20 = 40$
$-20 \quad -20$
$X = 20$

9.



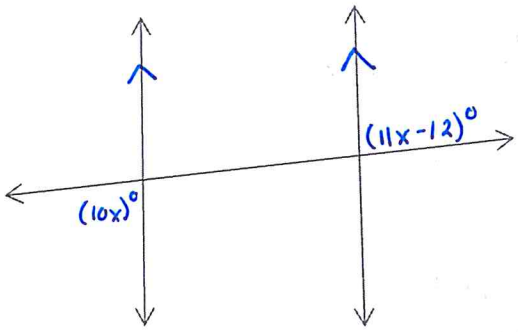
$3x - 40 = 2x - 10$
$-2x \quad -2x$
$x - 40 = -10$
$+40 \quad +40$
$X = 30$

10.



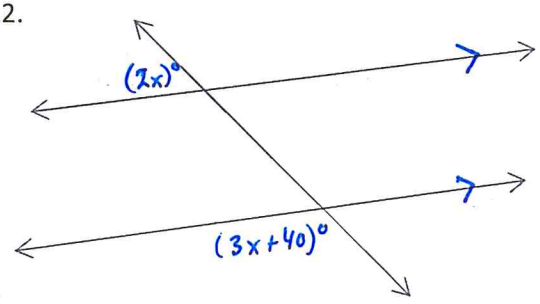
$5x - 10 + 8x - 5 = 180$
$13x - 15 = 180$
$+15 \quad +15$
$\frac{13x}{13} = \frac{195}{13}$
$X = 15$

11.



$10x = 11x - 12$
$-11x \quad -11x$
$\frac{-x}{-1} = \frac{-12}{-1}$
$X = 12$

12.



$2x + 3x + 40 = 180$
$5x + 40 = 180$
$-40 \quad -40$
$\frac{5x}{5} = \frac{140}{5}$
$X = 28$