Final Exam Review D   Math 7/8
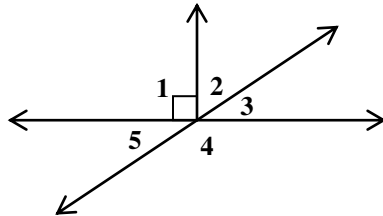
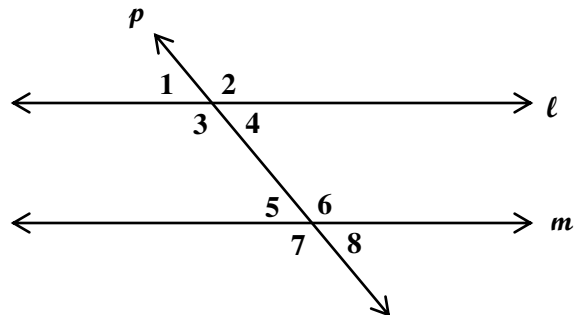Name:_____   Date:_____

Use the diagram below to answer questions (1) - (3)

(1):   Which angle is congruent to ∠ 5?   (1):   _____

(2):   Which angle is the complement of ∠ 3?   (2):   _____

(3):   Which angle is the supplement of ∠ 4?   (3):   _____

In the diagram, $\overrightarrow{l} \parallel \overrightarrow{m}$. $\overrightarrow{p}$ intersects both lines. Use this diagram to answer questions (4)-(8).

(4):   Name a pair of alternate exterior angles.   (4):   _____

(5):   If m ∠ 3 = 115°, then what is m ∠ 8?   (5):   _____

(6):   If m ∠ 5 = 40°, then what is m ∠ 1?   (6):   _____

(7):   If ∠ 4 = $x + 20°$ and ∠ 5 = $2x + 5°$, find the value of x. (show work)   (7):   _____

(8):   If ∠ 6 = $4x + 30°$ and ∠ 8 = $2x$, find the value of x. (show work)   (8):   _____

Answer questions (9)-(11) using the diagram below.

(9): Rotate pentagon abcde 90° in a clockwise direction. Label this image a'b'c'd'e'.

(10): Translate pentagon abcde by the following rule, $(x, y) \rightarrow (x+6, y-3)$. Label this image a"b"c"d"e".

(11): Reflect pentagon abcde in the *y*-axis. Label this a'''b'''c'''d'''e'''.

(12): Dilate pentagon abcde by a factor of 2. Use the grid below to create this transformation. Label this image a'b'c'd'e'.