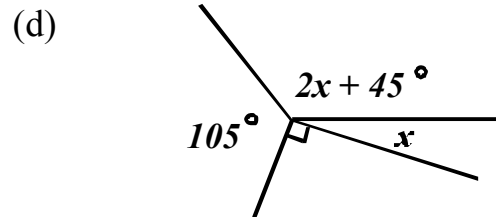
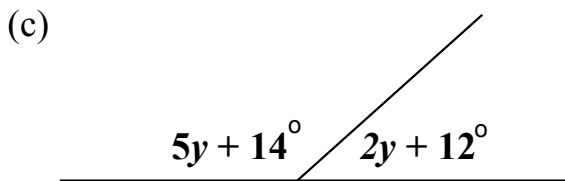
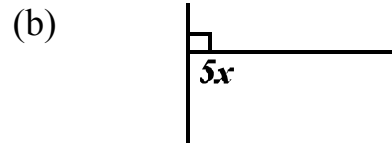
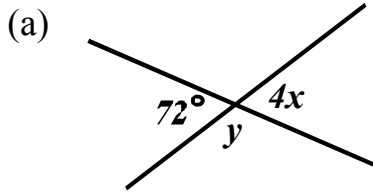
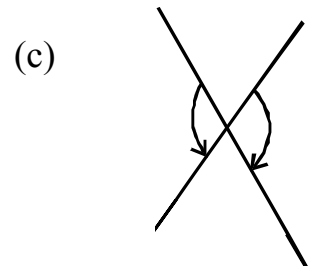
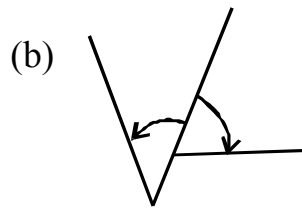
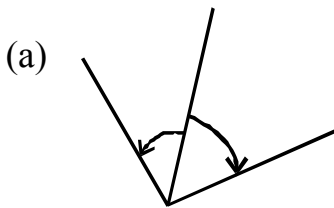


Exercise 2015-8EM-00006(2)

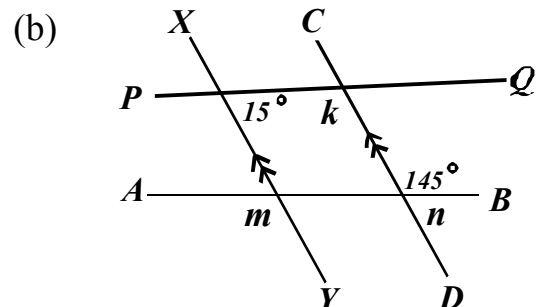
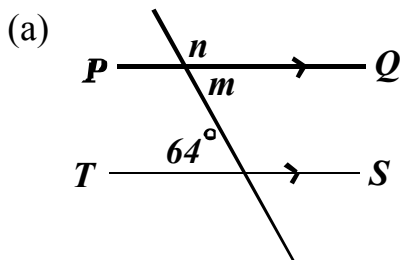
(1) Determine the value(s) of x and/or y in each of the following sketches. Also give complete reasons.



(2) Which of the following pairs of indicated angles are adjacent? If not adjacent, motivate why not.

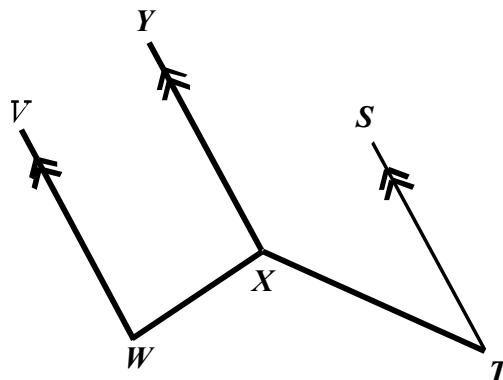


(3) Determine the value(s) of m , n and/or k in each of the following sketches. Also give complete reasons.



(4) (a) Label the following angles (according to size):

- (i) $\widehat{WXT}$
- (ii) $\widehat{XTS}$
- (iii) $\widehat{TXY}$



(b) Calculate the value of x if

$$\widehat{WXT} = 154^\circ \text{ with } \widehat{TXY} = 3x + 52^\circ$$

$$\text{and } \widehat{WXY} = 4x - 14^\circ$$

(c) Calculate, with reasons: (i) $\widehat{W}$
(ii) $\widehat{T}$

(5) Write three conditions under which two lines will be parallel to one another.

(6) Prove that $AB \parallel CD$ in each of the following sketches. Show all calculations:

