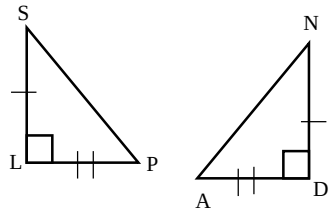
MATH 2 CHAPTER 6 PRACTICE QUIZ #11

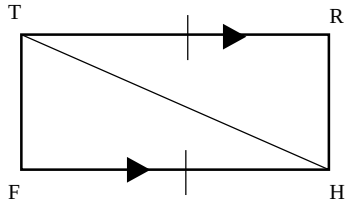
1. Write a congruence statement.

(a)



$\Delta AND \cong \Delta$_____

(b)



$\Delta HRT \cong \Delta$_____

2. What is the vertex of the parabola written in graphing form? What is the y-intercept?

(a)$y = (x + 7)^2 + 16$ vertex: (_____ , _____)

y-int: (0, _____)

(b)$y = (x - 10)^2 - 52$ vertex: (_____ , _____)

y-int: (0, _____)

3. Solve the equation.

(a) $0 = (x - 5)^2 - 16$ x = _____

x = _____

(a) $0 = (x + 10)^2 - 25$ x = _____

x = _____

4. Factor these expressions. Use factoring shortcuts (difference of squares and perfect square trinomials).

(a) $9x^2 - 16$ ( )( )

(b) $x^2 + 6x + 9$ ( )^2

(c) $4x^2 - 12x + 9$ ( )^2

(d) $121x^2 - 81$ ( )( )