Directions: Complete on seperate Paper!

8-7 Skills Practice

The Law of Cosines

In $\triangle RST$, given the following measures, find the measure of the missing side.

1. $r = 5, s = 8, m\angle T = 39$ $t = 5.2$

2. $r = 6, t = 11, m\angle S = 87$ $s = 12.25$

3. $r = 9, t = 15, m\angle S = 103$ $s = 19.2$

4. $s = 12, t = 10, m\angle R = 58$ $r = 10.8$

In $\triangle HIJ$, given the lengths of the sides, find the measure of the stated angle to the nearest tenth.

5. $h = 12, i = 18, j = 7; m\angle H = 24.7°$

6. $h = 15, i = 16, j = 22; m\angle I = 46.7°$

7. $h = 23, i = 27, j = 29; m\angle J = 70.4°$

8. $h = 37, i = 21, j = 30; m\angle H = 91.3°$