College Review Math   Name _____
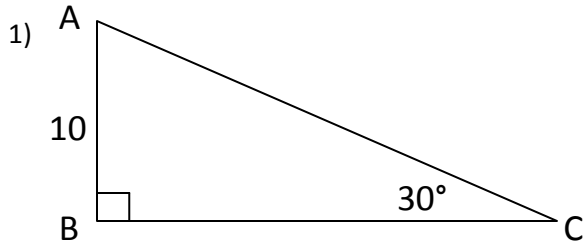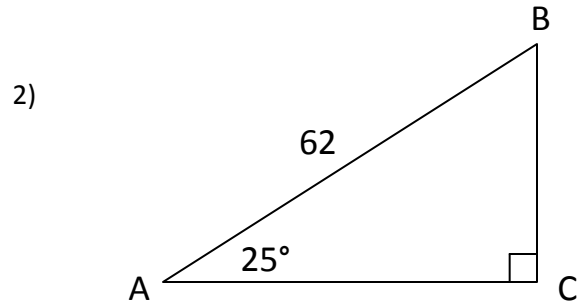Review 9-1 & 9-2

For all problems, round decimals (sides and angles) to nearest tenths (one decimal).
Find all missing sides and angles.

1)

A

10

30°

B   C

a = _____   b = _____   ∠A = _____

2)

B

62

25°

A   C

a = _____   b = _____   ∠B = _____

3)   In ΔABC, ∠A = 90°, b = 15 and c = 8

4)   In ΔFOX, ∠X = 90°, f = 2 and x = 4

a = _____   ∠B = _____   ∠C = _____

o = _____   ∠F = _____   ∠O = _____

Use ΔNED to the right to find the fraction equivalent
for the following trig functions.

N

8

D   E
$\sqrt{15}$

5) sin N = _____   6) cos D = _____

7) tan N = _____   8) tan D = _____

9) sec D = _____   10) csc N = _____

11) cot N = _____   12) sec N = _____
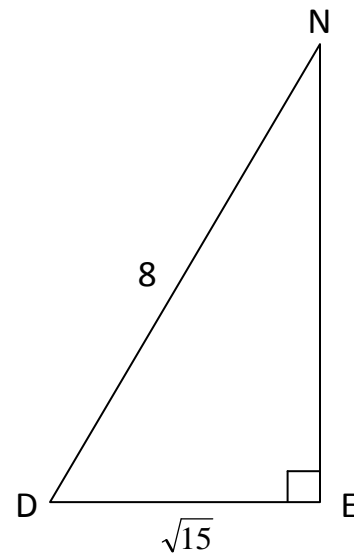
Find the area of each ΔABC.

13)   a = 8, b = 11 and ∠C = 60°

14)   b = 16, c = 20 and ∠A = 32°

15)   a = 5cm, c = 3cm, ∠A = 100°, ∠C = 55°

16)   a = 191yds, c = 49yds, ∠B = 18°

Given the area of ΔFAT, find all possible measures for the angle.

17)   K = 44.4mm^2, f = 18mm and t = 5mm
        Find ∠A

18)   K = 1256mi^2, a = 60.2mi and t = 45.75mi
        Find ∠F

Solve the following word problems. Make a drawing for each, then choose the correct trig function to solve.

19)   A person is standing 40 feet from the
        base of a flag pole. The angle at which
        they must look up to see the top of the pole
        is 16 degrees. If the height of the person
        is 6 feet tall, what is the approximate
        height of the flag pole?

20)   A plane is currently flying at an altitude of
        25,000 feet above sea level. If the plane
        is about to begin its descent at 5°, how far
        is the plane from its destination if the city
        in which it lands is 13,000 feet above sea
        level?