Math 1201: **ANSWERS**   Sec 2.1: Tangent Ratio Review Sheet
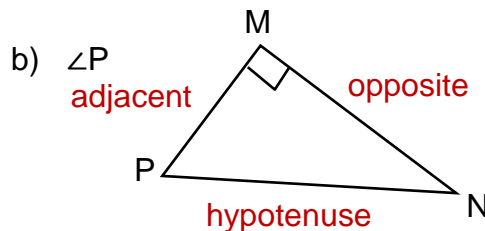
1. Label the hypotenuse, opposite and adjacent sides for each right triangle using the given reference angle.

a) ∠H

opposite   hypotenuse

F adjacent H

b) ∠P

adjacent   opposite

P

hypotenuse   N
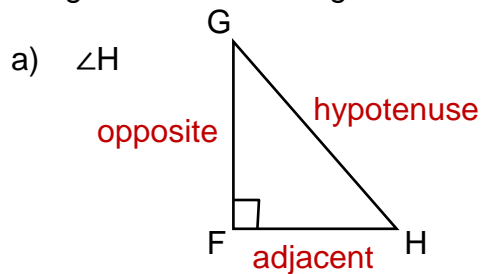
2. Find the tangent ratio in fraction form.

a) tan Y

7

3

$$\tan Y = \frac{7}{3}$$

b) tan W

16   15

$$\tan W = \frac{16}{15}$$

U   W
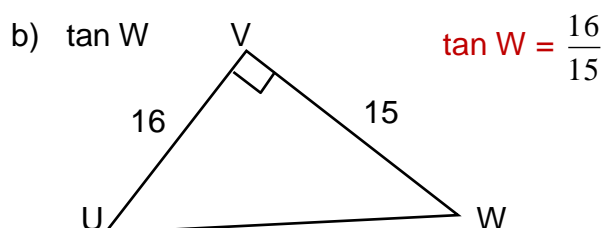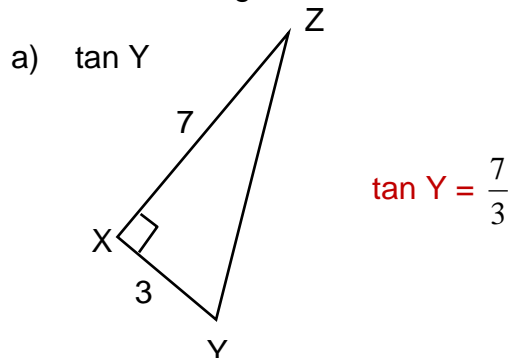
3. Find the measure of ∠A.

a) tan A = 0.5   ∠A = 27⁰

b) tan A = $\frac{5}{6}$ ∠A = 40⁰

4. Find the measure of ∠B to the nearest degree.

B   13   C

12

D

∠B = 43⁰
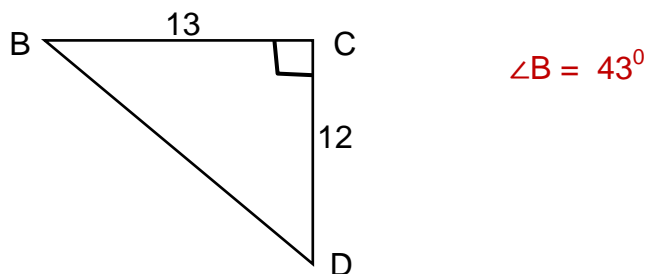
5. A telephone pole is supported by a wire. What angle, to the nearest degree, does the wire make with the ground?

∠x = 66⁰

18m

8m
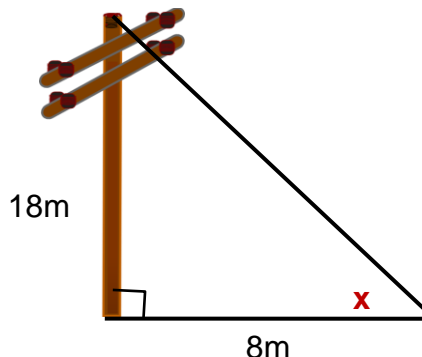
6. Victor is building a wheelchair ramp to an entranceway that is 3m above the sidewalk. The ramp will cover a horizontal distance of 50m. What angle, to the nearest degree, will the ramp make with the ground?

∠x = 3⁰

3m

x

50m