## Math 20 Pre-Calculus

# **PRACTICE QUIZ TRIGONOMETRY**

20.2	2	3	4
Outcome 2.1:	I can demonstrate understanding of:	I can determine exact trig	Solve a contextual problem,
I can demonstrate	- standard position of an angle and quadrants	values given an angle with	using trig ratios.
understanding of standard	<ul> <li>(+/-) signs of trig ratios and the CAST rule</li> </ul>	the use of special triangles	
position, primary trig ratios	- location of angles on the coordinate plane		Identify angles for which the
		I can solving basic trig	tangent ratio does not exist
	I can <b>determine</b> and apply reference angles	equations such as sin B = a	and explain why.
	I can determine exact trig values given a point on the		
	terminal arm		

#### Level 2

1.	Draw the following angles in standard position and state the quadrant in which
	they terminate.

a) 
$$-20^{\circ}$$

2. State the reference angle for each of the following.

3. Determine the value of  $\sin\!\theta$  ,  $\cos\,\theta$  ,  $\,\tan\,\theta$  given:

### Level 3

- 4. Determine the exact primary trigonometric ratios for each angle in standard position.
  - a) 135°

b) 300°

5. Each angle  $\theta$  is in standard position. State the quadrants in which the terminal arm of the angle could lie.

a) 
$$cos\theta = -\frac{2}{3}$$

b) 
$$tan\theta = -4$$

6. To the nearest degree, which values of  $\theta$  satisfy each equation for  $0^{\circ} \leq \theta \leq 360^{\circ}$ ?

a) 
$$\tan \theta = \frac{1}{2}$$

#### Level 4

7. A hiker sketches a map of her destination, D, form her starting point, O. The hiker can travel only west, then north. To the nearest kilometer, how far must she hike to get to her destination?

