### 1.5 Vectors Worksheet

Name: $\qquad$

Fill in the blank:
Arrows showing both $\qquad$ and $\qquad$ are called vectors.
Numerical directions: positive means $\qquad$ on $y$-axis or $\qquad$ on $x$-axis. Negative is the opposite.
Compass directions: north and east are usually $\qquad$ south and west are $\qquad$
Draw a compass rose ...

Examples of vector quantities include: $\qquad$

Scalar quantities have $\qquad$ but not $\qquad$ .

Examples of scalar quantities include:

Trigonometry Practice: SOH CAH TOA

1. Draw and solve (find all missing sides and angles) the following triangle (remember that side " $a$ " is across from angle " $A$ ", etc.): $\angle B=90^{\circ}, a=5 i n, \angle C=60^{\circ}$
2. Solve the following triangle: $<C=90 \mathrm{o}, \mathrm{a}=12 \mathrm{~cm}, \mathrm{~b}=17 \mathrm{~cm}$.
3. If a bunny hopped around a triangular path, where $\angle A=90^{\circ}, a=15 \mathrm{~m}, \angle B=20^{\circ}$, what would the bunny's displacement be? What would her distance travelled be?
4. An airplane had been heading due North from Pitt Meadows for 100 km , when the pilot changed destinations. He turned the plane East and travelled 80 km before landing in a lake. How much further did he travel than if he had gone directly from Pitt Meadows to the lake? What direction would he have headed to go directly to the lake?
