

**ATTENTION...** Before beginning any work with angles and a calculator, always verify that the calculator is set to « **DEGREE mode** ».

**ACTIVITY 1** In each case find the **cosine** (cos) of angle  $x$  (rounded to the thousandths place):

- a.* If  $x = 30^\circ$ , then  $\cos x = \dots\dots\dots$       *b.* If  $x = 90^\circ$ , then  $\cos x = \dots\dots\dots$       *c.* If  $x = 45^\circ$ , then  $\cos x = \dots\dots\dots$   
*d.* If  $x = 0^\circ$ , then  $\cos x = \dots\dots\dots$       *e.* If  $x = 20^\circ$ , then  $\cos x = \dots\dots\dots$       *f.* If  $x = 60^\circ$ , then  $\cos x = \dots\dots\dots$

**ACTIVITY 2** In each case find the **sine** (sin) of angle  $x$  (rounded to the thousandths place):

- a.* If  $x = 30^\circ$ , then  $\sin x = \dots\dots\dots$       *b.* If  $x = 90^\circ$ , then  $\sin x = \dots\dots\dots$       *c.* If  $x = 45^\circ$ , then  $\sin x = \dots\dots\dots$   
*d.* If  $x = 0^\circ$ , then  $\sin x = \dots\dots\dots$       *e.* If  $x = 20^\circ$ , then  $\sin x = \dots\dots\dots$       *f.* If  $x = 60^\circ$ , then  $\sin x = \dots\dots\dots$

**ACTIVITY 3** In each case find the **tangent** (tan) of angle  $x$  (rounded to the thousandths place):

- a.* If  $x = 30^\circ$ , then  $\tan x = \dots\dots\dots$       *b.* If  $x = 89^\circ$ , then  $\tan x = \dots\dots\dots$       *c.* If  $x = 45^\circ$ , then  $\tan x = \dots\dots\dots$   
*d.* If  $x = 0^\circ$ , then  $\tan x = \dots\dots\dots$       *e.* If  $x = 20^\circ$ , then  $\tan x = \dots\dots\dots$       *f.* If  $x = 60^\circ$ , then  $\tan x = \dots\dots\dots$

**ACTIVITY 2.4** In each case find the measure of angle  $x$  (rounded to the tenths place) given the **cosine** (cos):

- a.* If  $\cos x = 0.866$ , then  $x = \dots\dots\dots^\circ$       *b.* If  $\cos x = 0.643$ , then  $x = \dots\dots\dots^\circ$       *c.* If  $\cos x = 0.5$ , then  $x = \dots\dots\dots^\circ$   
*d.* If  $\cos x = 0.259$ , then  $x = \dots\dots\dots^\circ$       *e.* If  $\cos x = 1$ , then  $x = \dots\dots\dots^\circ$       *f.* If  $\cos x = 0.087$ , then  $x = \dots\dots\dots^\circ$

**ACTIVITY 5** In each case find the measure of angle  $x$  (rounded to the tenths place) given the **sine** (sin):

- a.* If  $\sin x = 0.866$ , then  $x = \dots\dots\dots^\circ$       *b.* If  $\sin x = 0.940$ , then  $x = \dots\dots\dots^\circ$       *c.* If  $\sin x = 0.5$ , then  $x = \dots\dots\dots^\circ$   
*d.* If  $\sin x = 0.342$ , then  $x = \dots\dots\dots^\circ$       *e.* If  $\sin x = 1$ , then  $x = \dots\dots\dots^\circ$       *f.* If  $\sin x = 0.087$ , then  $x = \dots\dots\dots^\circ$

**ACTIVITY 6** In each case find the measure of angle  $x$  (rounded to the tenths place) given the **tangent** (tan):

- a.* If  $\tan x = 0.176$ , then  $x = \dots\dots\dots^\circ$       *b.* If  $\tan x = 3.732$ , then  $x = \dots\dots\dots^\circ$       *c.* If  $\tan x = 0.5$ , then  $x = \dots\dots\dots^\circ$   
*d.* If  $\tan x = 0.577$ , then  $x = \dots\dots\dots^\circ$       *e.* If  $\tan x = 1$ , then  $x = \dots\dots\dots^\circ$       *f.* If  $\tan x = 11.43$ , then  $x = \dots\dots\dots^\circ$

**ACTIVITY 7** Fill in the blanks (rounded to the hundredths place).

- a.* If  $x = 32^\circ$ , then  $\sin x = \dots\dots\dots$       *b.* If  $\cos x = 0.921$ , then  $x = \dots\dots\dots^\circ$       *c.* If  $\tan x = 2$ , then  $x = \dots\dots\dots^\circ$   
*d.* If  $\sin x = 0.674$ , then  $x = \dots\dots\dots^\circ$       *e.* If  $x = 47^\circ$ , then  $\sin x = \dots\dots\dots$       *f.* If  $x = 87^\circ$ , then  $\cos x = \dots\dots\dots$   
*g.* If  $x = 65^\circ$ , then  $\tan x = \dots\dots\dots$       *h.* If  $x = 43^\circ$ , then  $\cos x = \dots\dots\dots$       *i.* If  $x = 22^\circ$ , then  $\sin x = \dots\dots\dots$   
*j.* If  $\tan x = 6.4$ , then  $x = \dots\dots\dots^\circ$       *k.* If  $\cos x = 0.164$ , then  $x = \dots\dots\dots^\circ$       *l.* If  $x = 78^\circ$ , then  $\tan x = \dots\dots\dots$   
*m.* If  $\tan x = 0.694$ , then  $x = \dots\dots\dots^\circ$       *n.* If  $\sin x = 0.094$ , then  $x = \dots\dots\dots^\circ$       *o.* If  $\tan x = 10$ , then  $x = \dots\dots\dots^\circ$   
*p.* If  $\cos x = 0.394$ , then  $x = \dots\dots\dots^\circ$       *q.* If  $\tan x = 3.6$ , then  $x = \dots\dots\dots^\circ$       *r.* If  $\sin x = 0.576$ , then  $x = \dots\dots\dots^\circ$   
*s.* If  $\tan x = 0.953$ , then  $x = \dots\dots\dots^\circ$       *t.* If  $x = 7^\circ$ , then  $\tan x = \dots\dots\dots$       *u.* If  $x = 80^\circ$ , then  $\cos x = \dots\dots\dots$