

**SM3 8.6 odd answers**

1.  $x = 10$

3.  $\sin \theta = \frac{7\sqrt{58}}{58}$

5.  $\sin \theta = \frac{4}{5}, \cos \theta = \frac{3}{5}, \tan \theta = \frac{4}{3}$

$\csc \theta = \frac{5}{4}, \sec \theta = \frac{5}{3}, \cot \theta = \frac{3}{4}$

7.  $\sin \theta = -\frac{2\sqrt{13}}{13}, \cos \theta = -\frac{3\sqrt{13}}{13}, \tan \theta = \frac{2}{3}$

$\csc \theta = -\frac{\sqrt{13}}{2}, \sec \theta = -\frac{\sqrt{13}}{3}, \cot \theta = \frac{3}{2}$

9.  $\theta = 28.1^\circ$

11.  $(4, 3)$  and  $(-4, 3)$

13.  $(-6, \sqrt{85})$  and  $(-6, -\sqrt{85})$

15.  $(\sqrt{11}, -5)$  and  $(-\sqrt{11}, -5)$

17.  $(3, 4)$  and  $(3, -4)$

$53.1^\circ$  and  $306.9^\circ$

19.  $(5, -12)$  and  $(-5, -12)$

$292.6^\circ$  and  $247.4^\circ$

21.  $(2\sqrt{14}, 5)$  and  $(-2\sqrt{14}, 5)$

$33.7^\circ$  and  $146.3^\circ$

23.  $\sin^{-1} \left( \frac{t-2}{-6} \right) = m$