

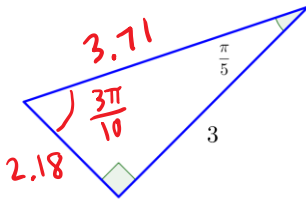
1. $x = 10\sqrt{3} - \frac{10}{\sqrt{3}}$

2.

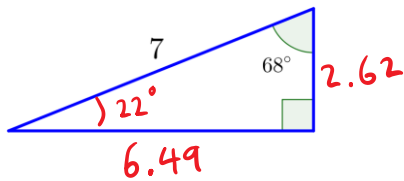
- a) 1
b) 2

3. $\sin \theta = \frac{3}{4}$, $\cos \theta = -\frac{\sqrt{7}}{4}$, $\tan \theta = -\frac{3}{\sqrt{7}}$, $\csc \theta = \frac{4}{3}$, $\sec \theta = -\frac{4}{\sqrt{7}}$, $\cot \theta = -\frac{\sqrt{7}}{3}$

4.



5.



6.

- a) $\frac{1}{\sqrt{2}}$ (or $\frac{\sqrt{2}}{2}$)
 b) $\frac{\sqrt{3}}{2}$
 c) $\frac{1}{2}$
 d) $-\frac{\sqrt{3}}{2}$
 e) $-\frac{1}{\sqrt{3}}$ (or $-\frac{\sqrt{3}}{3}$)
 f) $-\frac{1}{\sqrt{3}}$ (or $-\frac{\sqrt{3}}{3}$)
 g) $-\frac{2}{\sqrt{3}}$ (or $-\frac{2\sqrt{3}}{3}$)
 h) $\sqrt{2}$
 i) -1

7. $-\frac{5}{4}$

8. $\frac{\sqrt{33}}{7}$