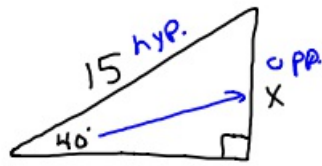


1-22-18 5th Geo

①



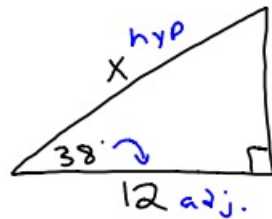
SOH
CAH
TOA

$$\frac{\sin 40^\circ}{1} = \frac{X}{15}$$

$$X = 15 \cdot \sin 40^\circ$$

$$X \approx 9.6$$

②



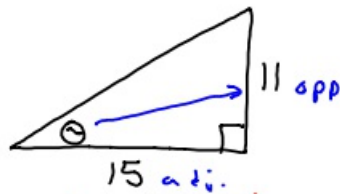
SOH
CAH
TOA

$$\frac{\cos 38^\circ}{1} = \frac{12}{X}$$

$$\cancel{X \cdot \cos 38^\circ} = \frac{12}{\cancel{\cos 38^\circ}}$$

$$X \approx 15.2$$

③

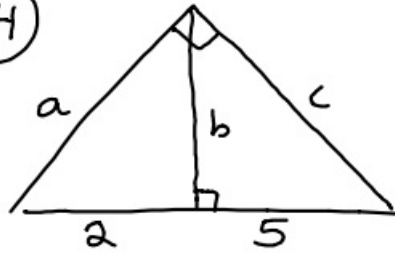


SOH
CAH
TOA

$$\cancel{\tan^{-1}} \theta = \frac{11}{15}$$

$$\theta \approx 36.3^\circ$$

④

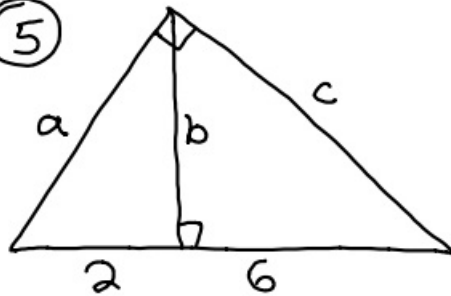


$$a = \sqrt{2 \cdot 7} = \sqrt{14}$$

$$b = \sqrt{2 \cdot 5} = \sqrt{10}$$

$$c = \sqrt{5 \cdot 7} = \sqrt{35}$$

⑤

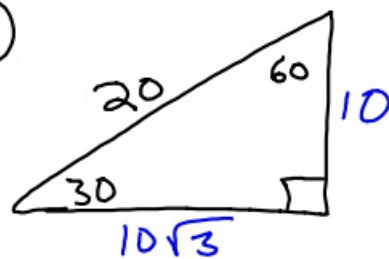


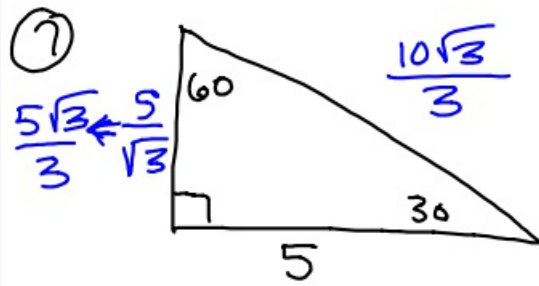
$$a = \sqrt{2 \cdot 8} = \sqrt{16} = 4$$

$$b = \sqrt{2 \cdot 6} = \sqrt{12} = 2\sqrt{3}$$

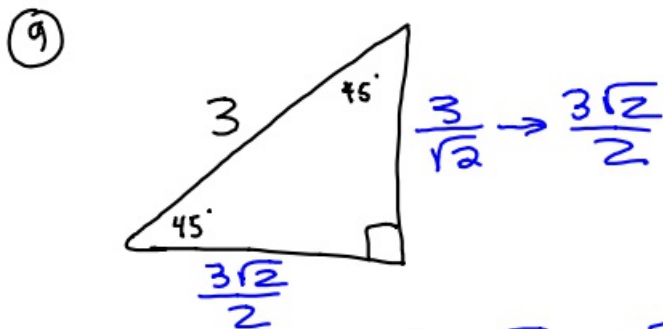
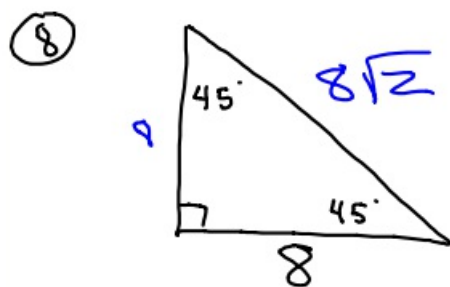
$$c = \sqrt{6 \cdot 8} = \sqrt{48} = 4\sqrt{3}$$

⑥

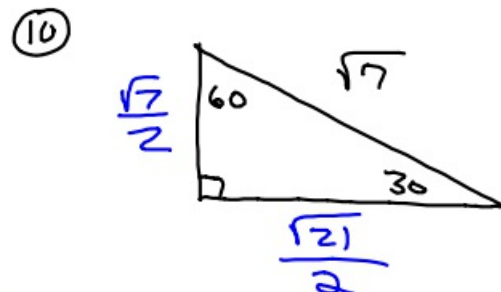




$$\frac{5}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{5\sqrt{3}}{3}$$



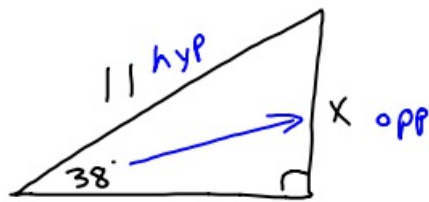
$$\frac{3}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{3\sqrt{2}}{2}$$



$$\frac{\sqrt{7}}{2} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{21}}{2}$$

1-22-18 6th Geo

①



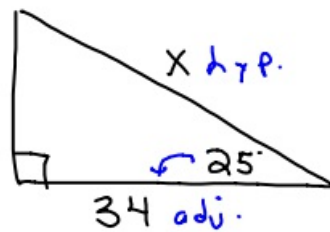
SOH
CAH
TOA

$$\frac{\sin 38^\circ}{1} = \frac{x}{11}$$

$$x = 11 \cdot \sin 38^\circ$$

$$x \approx 6.8$$

②



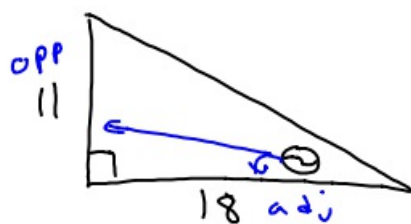
SOH
CAH
TOA

$$\frac{\cos 25^\circ}{1} = \frac{34}{x}$$

$$\frac{x \cdot \cancel{\cos 25^\circ}}{\cancel{\cos 25^\circ}} = \frac{34}{\cos 25^\circ}$$

$$x \approx 37.5$$

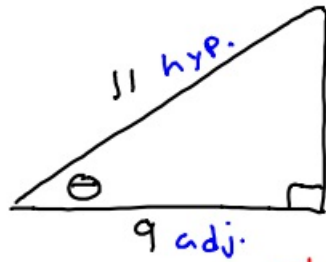
③



$$\cancel{\tan^{-1} \tan} \theta = \tan^{-1} \frac{11}{18}$$

$$\theta = 31.4^\circ$$

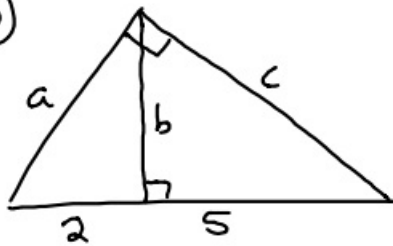
④



$$\cos^{-1} \cos \theta = \cos^{-1} \frac{9}{11}$$

$$\theta \approx 35.1^\circ$$

⑤

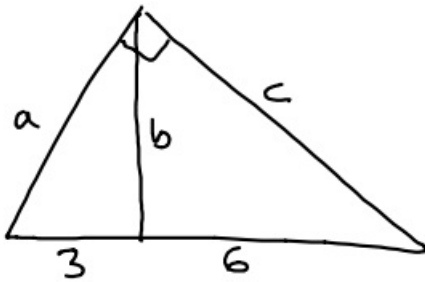


$$a = \sqrt{2 \cdot 7} = \sqrt{14}$$

$$b = \sqrt{2 \cdot 5} = \sqrt{10}$$

$$c = \sqrt{5 \cdot 7} = \sqrt{35}$$

⑥



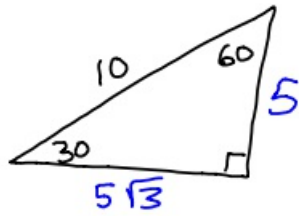
$$a = \sqrt{3 \cdot 9} = \sqrt{27} = 3\sqrt{3}$$

$$b = \sqrt{3 \cdot 6} = \sqrt{18} = 3\sqrt{2}$$

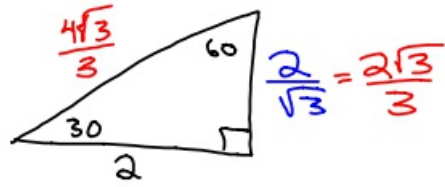
$$c = \sqrt{6 \cdot 9} = \sqrt{54} = 3\sqrt{6}$$



7

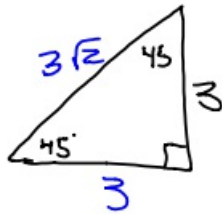


8

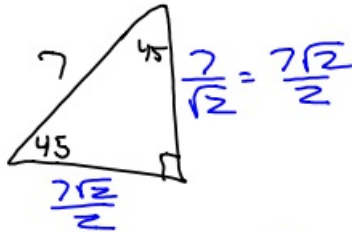


$$\frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$

9



10



$$\frac{7}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{7\sqrt{2}}{2}$$