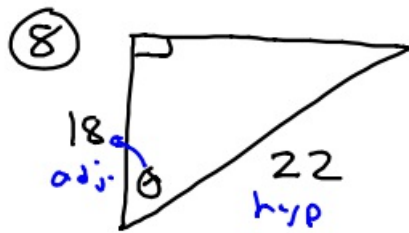


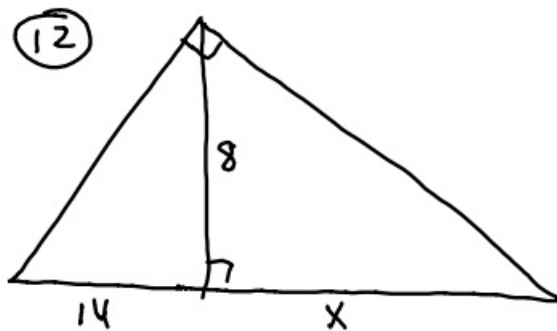
1-23-18 5<sup>th</sup> Geo

Ch. 8 PT 1



$$\cos^{-1} \frac{\text{adj}}{\text{hyp}} = \cos^{-1} \frac{18}{22}$$

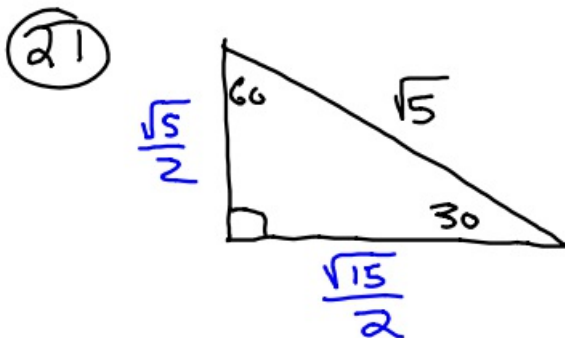
$$\theta \approx 35.1^\circ$$



$$8^2 = \sqrt{14 \cdot x}^2$$

$$\frac{64}{14} = \frac{14 \cdot x}{14}$$

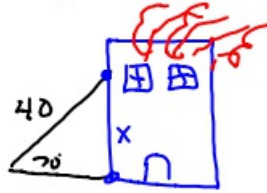
$$4.6 \approx x$$



$$\frac{\sqrt{5}}{2} \cdot \frac{\sqrt{3}}{1}$$

## New

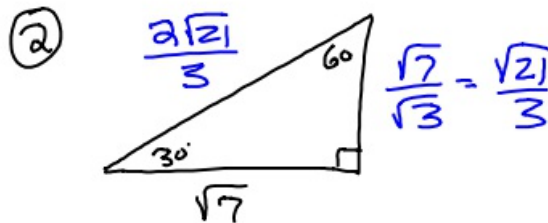
- ① To the fire I take my 40 ft. ladder. When putting it against the building, I must form a  $70^\circ$  angle with the ground. How high up the building will my ladder reach?



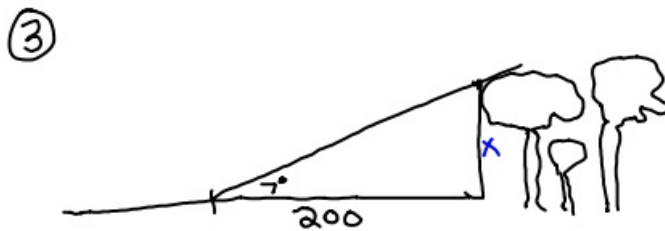
$$\frac{\sin 70^\circ}{1} = \frac{X}{40}$$

$$X = 40 \cdot \sin 70^\circ$$

$$X \approx 37.6 \text{ feet}$$



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

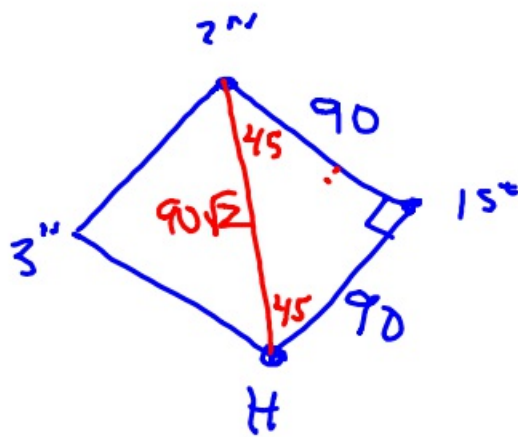


$$\frac{\tan 7^\circ}{1} = \frac{X}{200}$$

$$X = 200 \cdot \tan 7^\circ$$

$$X \approx 24.6$$

- ④ If the length between bases in baseball is 90 feet, how far must the catcher throw the ball to 2<sup>nd</sup> to get out the runner who is stealing base?



$$90\sqrt{2} \approx 127.3$$

⑤  $2\sqrt{3} \cdot 5\sqrt{3} \cdot \sqrt{5} \cdot \sqrt{2} =$

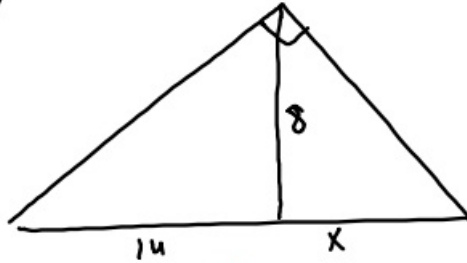
$10 \cdot 3 \cdot \sqrt{5} \sqrt{2}$

$30\sqrt{10}$

1-23-18 6<sup>th</sup> Geo

Ch 8 PT 1

(12)



$$8 = \sqrt{14 \cdot x}$$

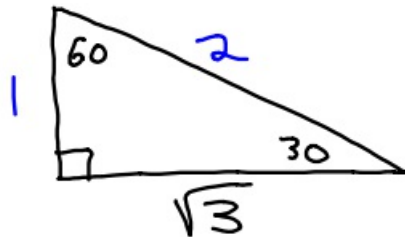
$$\frac{64}{14} = \frac{14x}{14}$$

$$4\frac{4}{7} = x$$

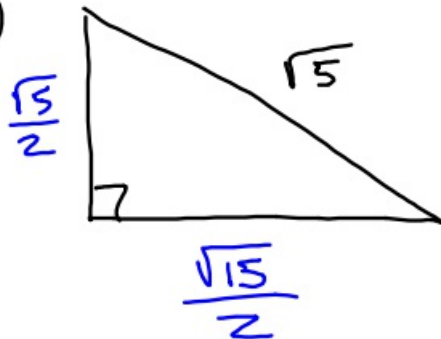
$$4.571428$$

$$\frac{1}{7} = .142857$$

(18)



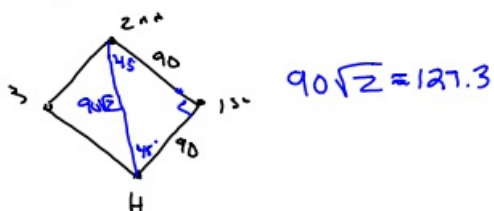
(21)



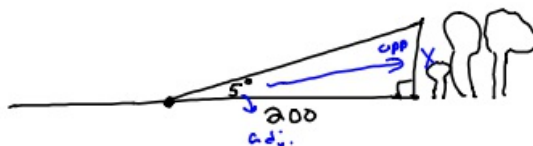
$$\frac{\sqrt{5}}{2} \cdot \frac{\sqrt{3}}{1} =$$

Now

- ① In baseball the bases are 90 feet apart. How far is it from home plate to 2<sup>nd</sup> base?



②



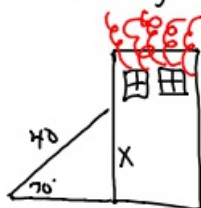
$$\frac{\tan 5^\circ}{1} = \frac{x}{200}$$

$$x = 200 \cdot \tan 5^\circ$$

$$x \approx 17.5$$

- ③ When putting a ladder against a building it should be 70' with the ground. How high up a building can my 40 foot ladder go?

SOH  
CAH  
TOA



$$\frac{\sin 70^\circ}{1} = \frac{x}{40}$$

$$x = 40 \cdot \sin 70^\circ$$

$$x \approx 37.6$$

④  $2\sqrt{3} \cdot 4\sqrt{3} \cdot \sqrt{2} \cdot \sqrt{5}$

$8 \cdot \underline{3} \cdot \sqrt{10}$

$24\sqrt{10}$