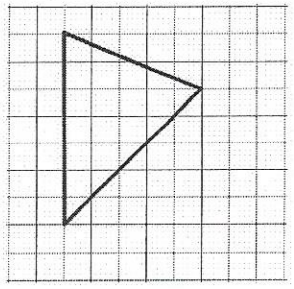
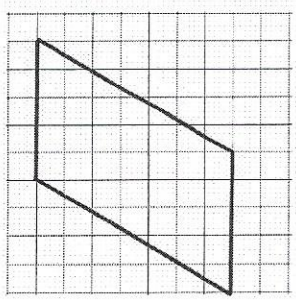
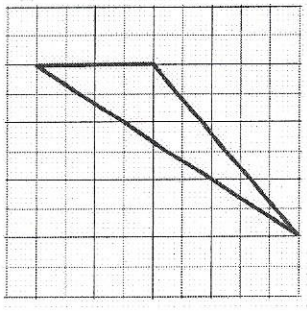
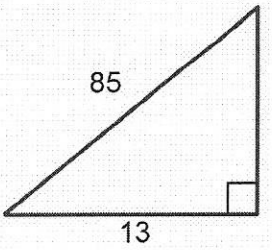
Geo Practice #6 Areas of △'s & ||-grams Monday, March 23, 2020

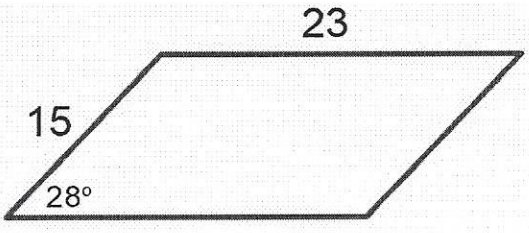
Find each area. Round to the nearest hundredth as needed.

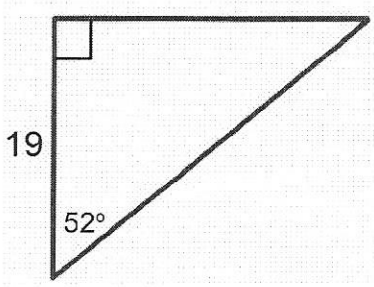
1. 

2. 

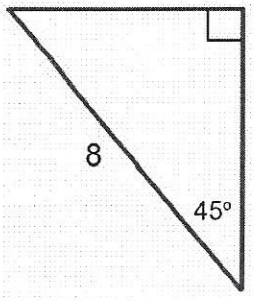
3. 

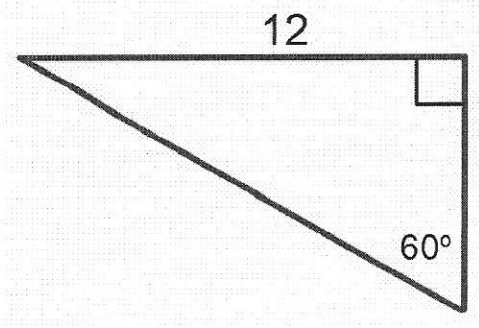
4. 

5. 

6. 

Find the EXACT area of each Special Right Triangle.

7. 

8. 

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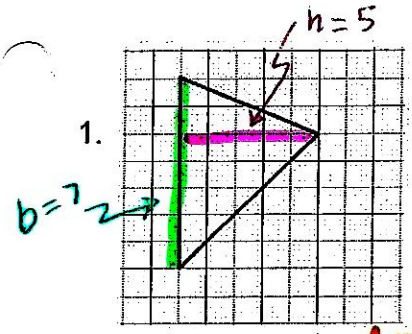
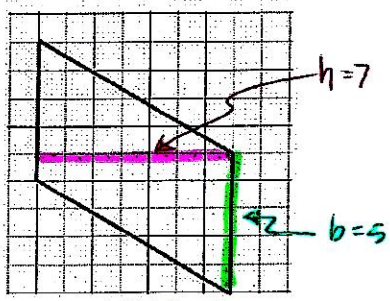
Answers

Find each area. Round to the nearest hundredth as needed.

1. 

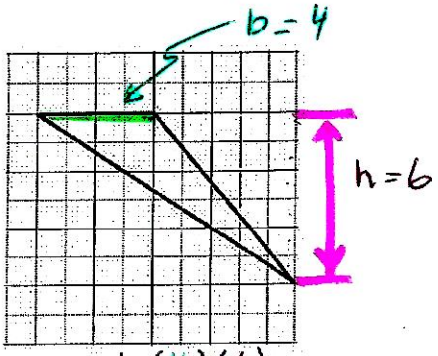
$A = \frac{1}{2}(7)(5)$

$A = 17.5$

2. 

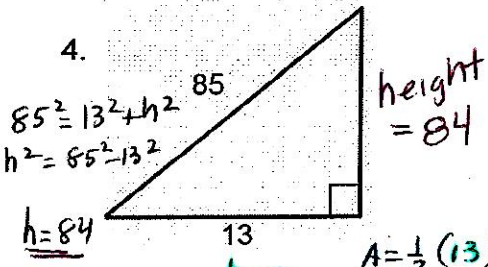
$A = (5)(7)$

$A = 35$

3. 

$A = \frac{1}{2}(4)(6)$

$A = 12$

4. 

$85^2 = 13^2 + h^2$

$h^2 = 85^2 - 13^2$

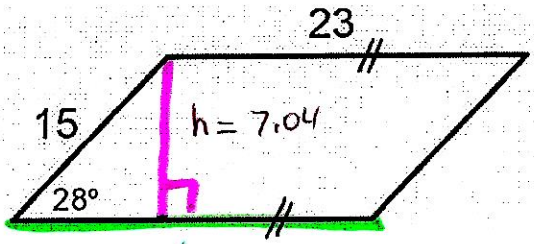
$h = 84$

height = 84

base

$A = \frac{1}{2}(13)(84)$

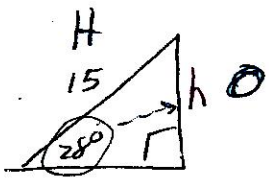
$A = 546$

5. 

$b = 23$

$A = \frac{1}{2}(23)(7.04)$

$A = 161.92$

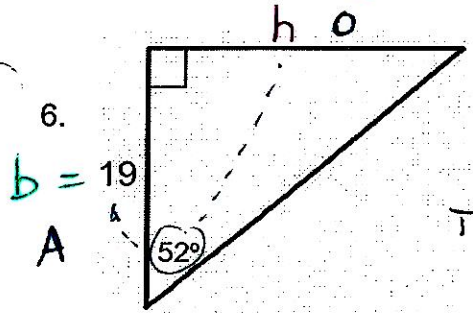


SOHCAHTOA

$\sin 28° = \frac{h}{15}$

$h = 15 \sin 28°$

$h = 7.04$

6. 

SOHCAHTOA

$\tan 52° = \frac{h}{19}$

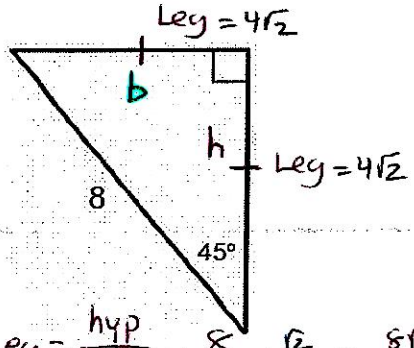
$h = 19 \tan 52°$

$h = 24.32$

$A = \frac{1}{2}(19)(24.32)$

$A = 231.04$

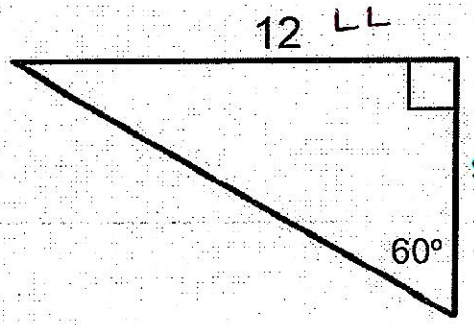
Find the EXACT area of each Special Right Triangle.

7. 

$Leg = \frac{hyp}{\sqrt{2}} = \frac{8}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$

$A = \frac{1}{2}(4\sqrt{2})(4\sqrt{2})$

$A = 16$

8. 

$SL = \frac{LL}{\sqrt{3}} = \frac{12}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{12\sqrt{3}}{3} = 4\sqrt{3}$

$A = \frac{1}{2}(4\sqrt{3})(12)$

$A = 24\sqrt{3}$