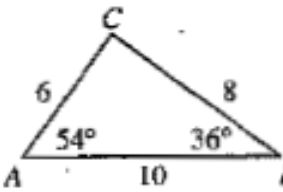
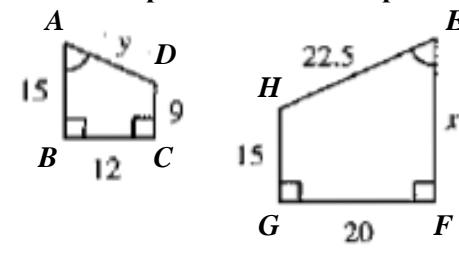


**SHOW WORK!** Give exact answers (whole numbers, fractions, mixed numbers, or decimals) in simplest form. Do not use rounded off decimals as answers.

<p>1. Simplify the ratio: <math>\frac{6x^2 y^3}{15x^5 y}</math></p>	<p>2. Complete: If <math>5x = 4y</math>, then <math>\frac{y}{x} = \underline{\hspace{1cm}}</math> and <math>\frac{x}{4} = \underline{\hspace{1cm}}</math>.</p>
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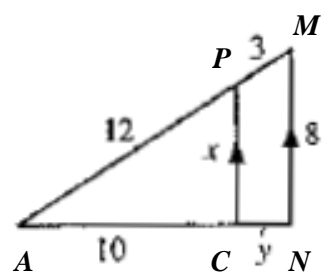
<p>3. Write each ratio in simplest form.</p>  <p>a) <math>AC : BC : AB</math> b) <math>m\angle C : m\angle B</math></p>	<p>4. Solve for <math>x</math>.</p> $\frac{4}{12} = \frac{x+2}{2x+5}$
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5. Given: trapezoid  $ABCD \sim$  trapezoid  $EFGH$



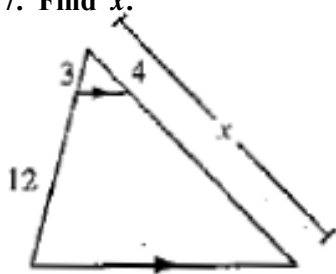
a) Find the scale factor for trap.  $ABCD$  to trap.  $EFGH$ .  
b) If  $m\angle A = 65$ , find  $m\angle H$   
c) Find  $x$  and  $y$ .

6. Complete:

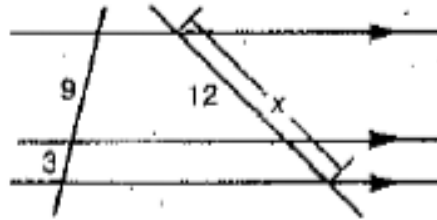


a)  $\triangle PAC \sim \triangle \underline{\hspace{1cm}}$       b)  $\frac{PA}{\underline{\hspace{1cm}}} = \frac{AC}{\underline{\hspace{1cm}}} = \frac{CP}{\underline{\hspace{1cm}}}$   
c) Find  $x$  and  $y$ .

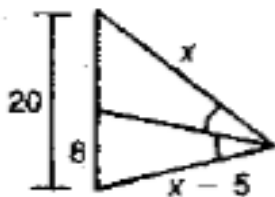
7. Find  $x$ .



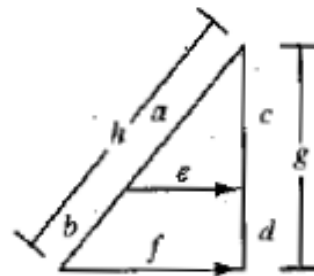
8. Find  $x$ .



9. Find  $x$ .



10. Is the proportion correct? Yes or No.



a)  $\frac{e}{f} = \frac{a}{h}$

b)  $\frac{e}{f} = \frac{c}{d}$

c)  $\frac{b}{a} = \frac{d}{c}$

d)  $\frac{b}{h} = \frac{c}{g}$

11. (review)

Given:  $A ( 4, 2 )$  and  $B ( 8, -4 )$ .

Give answers in simplest form.

a) slope of  $\overline{AB}$

b) slope of line parallel to  $\overline{AB}$

c) slope of line perpendicular to  $\overline{AB}$

d) length of  $\overline{AB}$

e) midpoint of  $\overline{AB}$

12. (review)

Graph a line through  $( -4, 3 )$  with slope  $\frac{-2}{5}$ .

