

Chapter 11 Pretest

$$\textcircled{1} \frac{k}{k-6} = \frac{k+2}{k}$$

$$\textcircled{2} \frac{m+9}{18} = \frac{m+2}{m}$$

$\textcircled{5}$ Assume the exchange rate of Canadian dollars to American dollars is 1 to 0.78. If a camera costs \$55 Canadian, what is the price in American dollars?

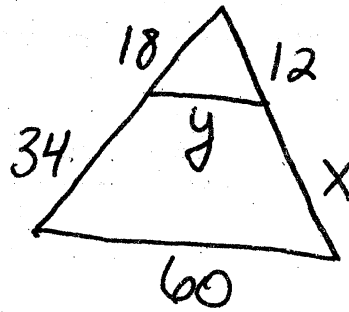
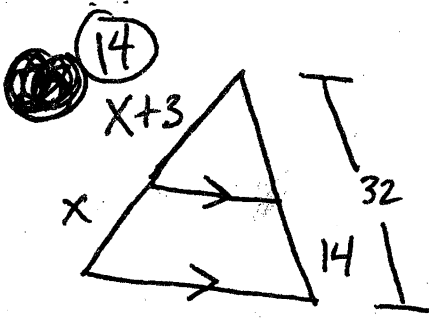
$\textcircled{6}$ The floorplan of a house is drawn to the scale of $\frac{1}{4}'' = 6\text{ft}$. If the size of the actual room is 33' by 24', what is the size of the room on the floorplan?

$\textcircled{7}$ A photograph is 4 inches wide and 6 inches high. An enlargement is 21 inches high, how wide is it?

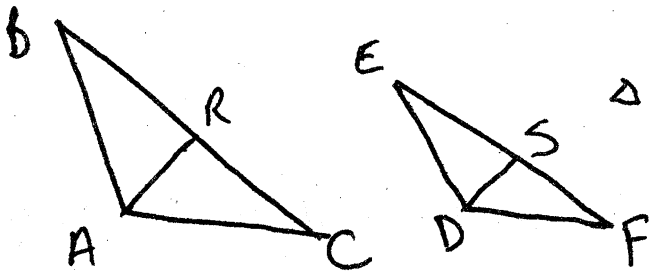
* Assume the measures of the corresponding sides of $\triangle ABC$ and $\triangle DEF$ are proportional.

$$\textcircled{10} \begin{array}{ll} BC = 18 & EF = 32 \\ AC = x-3 & DF = x \end{array} \text{ Solve for } x.$$

$$\textcircled{11} \begin{array}{l} AB = x+1 \\ AC = x-1 \\ DE = 5 \\ DF = 2 \end{array} \text{ Solve for } x.$$

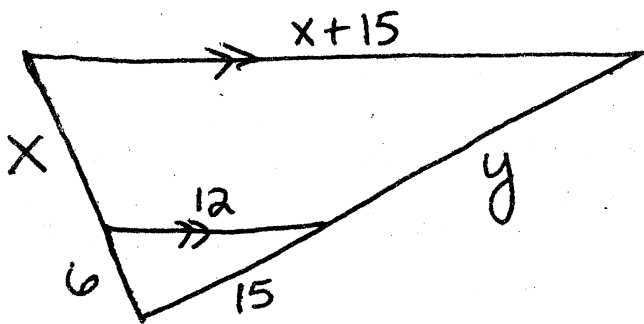


⑮ $x = ?$
 ⑯ $y = ?$

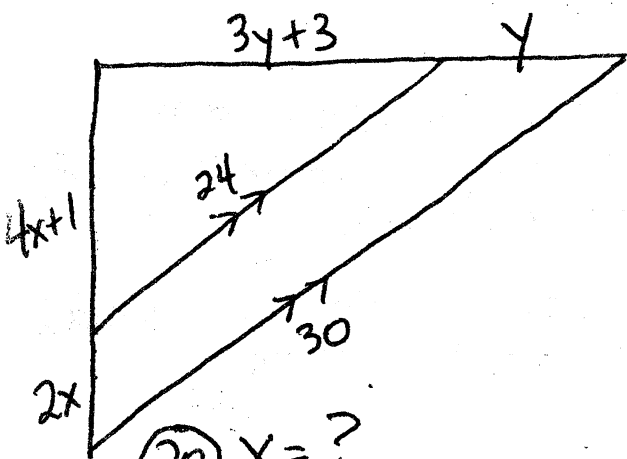


$\triangle ABC \sim \triangle DEF$

⑰ $AB = 9x + 2$ $AR = 40$
 $DE = 7x + 3$ $DS = 32$

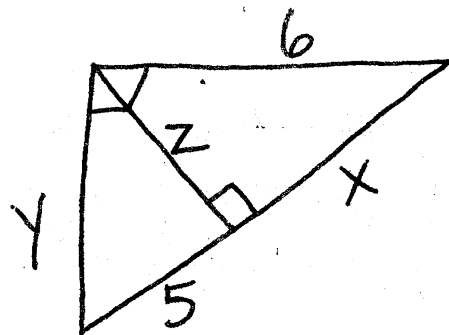


⑱ $x = ?$ ⑲ $x = ?$



⑳ $x = ?$

㉑ $y = ?$



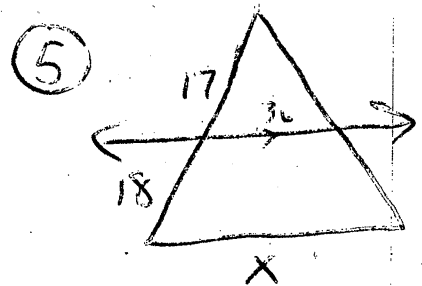
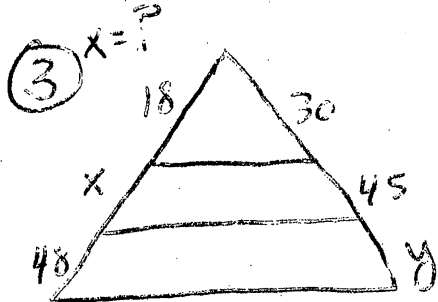
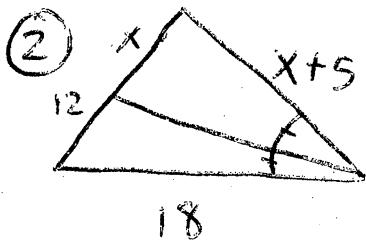
㉒ $x = ?$

㉓ $y = ?$

㉔ $z = ?$

Chapter 11 Review

- ① A scale model is drawn $\frac{1}{8}$ " to 6'. If the model's dimensions are $3\frac{1}{4}$ " to $2\frac{1}{2}$ ", what is the size of the actual object?



④ $y = ?$

- ⑥ The ratio of the volumes of two spheres is 729:125. What is the diameter of the larger, if the smaller has a radius of 15cm?

- ⑦ The ratio of base areas of 2 prisms is 49:4. What is the ratio of their volumes?

- ⑧ The volumes of the similar prisms have a ratio of $\frac{8}{27}$:64. What is the ratio of their surface areas?

- ⑨ Area of a region is 500cm². If the dimensions of this region were multiplied by 4, what is the new area?

(10) The volume of a scale model is 2744 cm^3 . This model represents an object whose dimensions are 3 times as large. What is the volume of the larger object?