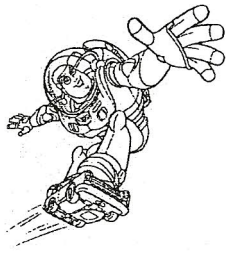


PROPORTIONS AND SIMILAR FIGURES



NAME _____ DATE _____

SOLVE THE FOLLOWING PROPORTIONS:

1. $\frac{24}{x+30} = \frac{8}{14}$

2. $\frac{x}{90} = \frac{3}{10}$

3. $\frac{x-8}{84} = \frac{8}{21}$

4. $\frac{9}{x} = \frac{15}{25}$

5. $\frac{72}{84} = \frac{x}{14}$

6. $\frac{x+2}{18} = \frac{1}{6}$

7. $\frac{63}{21} = \frac{3}{x}$

8. $\frac{x+4}{28} = \frac{x-8}{7}$

9. $\frac{12}{x} = \frac{14}{21}$

10. $\frac{21}{42} = \frac{8}{x}$

If $\frac{a}{b} = \frac{3}{4}$ which of the following must be true?

11. $4a = 3b$

12. $3a = 4b$

13. $\frac{a}{3} = \frac{b}{4}$

14. $\frac{4}{3} = \frac{b}{a}$

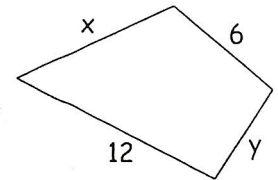
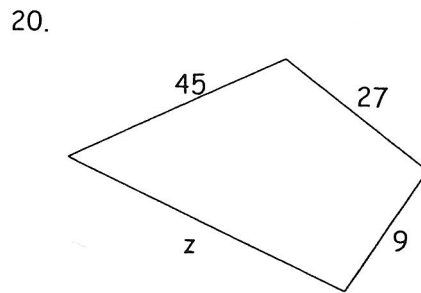
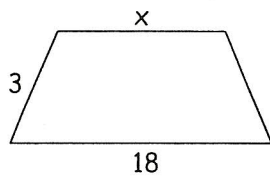
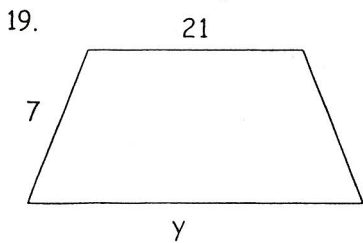
15. $\frac{a+b}{a} = \frac{3+4}{3}$

16. $\frac{a+4}{a} = \frac{3+4}{3}$

17. $\frac{a+b}{b} = \frac{3+4}{b}$

18. $\frac{a+b}{a} = \frac{3+4}{4}$

Find the similarity ratio for each of the following. Then solve for the variables.



Similarity Ratio: _____

x = _____ y = _____

Similarity Ratio: _____

x = _____ y = _____

z = _____