

Answers

1. 16

2. 75

3. 14

4. $\frac{4}{5}$

5. 2

6. $4+m$

7. 3.2

8. 4

9. 5, 25

10. 16

11. $\frac{1}{2}$

12. 2:1

13. $d = 3.5$

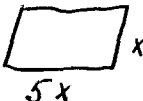
$t = 7$

$u = 5$

14. $ABCD \rightarrow 15$

$WXYZ \rightarrow 30$

15. $1^{\circ} 2$

16.  $5x \cdot x = 125$
 $5x^2 = 125$
 $x^2 = 25$
 $x = 5$

Length = 25
 Width = 5

17. $x^2 = 72$
 $x = 6\sqrt{2}$ $\frac{6}{x} = \frac{x}{12}$

18. $\frac{9}{15} = \frac{15}{x}$
 $9x = 225$
 $x = 25$

19. $\frac{\text{actual}}{\text{Toy Boat}} = \frac{25}{1} = \frac{40}{x}$ $25x = 40$
 $x = 1.6$ or $1\frac{3}{5}$ or $\frac{8}{5}$

20. $\frac{\Delta ABC}{\Delta DEF} = \frac{3}{4} = \frac{42}{x}$ $3x = 168$
 $x = 56 \text{ cm}$

21. $\frac{10}{y} = \frac{8}{10}$ $x + x + 42 = 180$
 $8y = 100$ $2x = 138$
 $y = \frac{100}{8} = \frac{25}{2} = 12.5$ $x = 69$

22. Yes. Angles \cong
 $\frac{5}{8} = \frac{8}{12.8}$
 $64 = 64 \checkmark$

24. $\frac{NI}{HO} = \frac{IC}{OP} = \frac{CE}{PE} = \frac{EN}{EH}$