Solving Proportions Extra Practice

1. $\frac{3}{4}=\frac{9}{x}$

2. $\frac{1}{x}=\frac{3}{6}$

3. $\frac{3}{2}=\frac{x}{8}$

4. $\frac{x}{4}=\frac{15}{10}$

5. $\frac{10}{15}=\frac{x}{3}$

6. $\frac{x}{6}=\frac{12}{8}$

7. $\frac{20}{x}=\frac{5}{4}$

8. $\frac{20}{25}=\frac{4}{x}$

9. $\frac{15}{3} = \frac{25}{x}$

10. $\frac{8}{10} = \frac{x}{7}$

11. $\frac{4}{x} = \frac{5}{14}$

12. $\frac{0.2}{0.9} = \frac{3.6}{x}$

13. $\frac{1.4}{x} = \frac{0.25}{7.5}$

14. $\frac{x}{\frac{1}{3}} = \frac{\frac{15}{9}}{2}$

15. $\frac{2\frac{2}{5}}{1\frac{2}{3}} = \frac{6}{x}$

Answers

1. $\frac{3}{4}=\frac{9}{x}\rightarrow 3\times x=4\times 9\rightarrow 3x=36\rightarrow \frac{3x}{3}=\frac{36}{3}\rightarrow x=12$

2. $\frac{1}{x}=\frac{2}{6}\rightarrow 1\times 6=x\times 2\rightarrow 6=2x\rightarrow \frac{6}{2}=\frac{2x}{2}\rightarrow 3=x$ or $x=3$

3. $\frac{3}{2}=\frac{x}{8}\rightarrow 3\times 8=x\times 2\rightarrow 24=2x\rightarrow \frac{24}{2}=\frac{2x}{2}\rightarrow 12=x$ or $x=12$

4. $\frac{x}{4}=\frac{15}{10}\rightarrow x\times 10=4\times 15\rightarrow 10x=60\rightarrow \frac{10x}{10}=\frac{60}{10}\rightarrow x=6$

5. $\frac{10}{15}=\frac{x}{3}\rightarrow 10\times 3=15\times x\rightarrow 30=15x\rightarrow \frac{30}{15}=\frac{15x}{15}\rightarrow 2=x$ or $x=2$

6. $\frac{x}{6}=\frac{12}{8}\rightarrow x\times 8=6\times 12\rightarrow 8x=72\rightarrow \frac{8x}{8}=\frac{72}{8}\rightarrow x=9$

7. $\frac{20}{x}=\frac{5}{4}\rightarrow 20\times 4=x\times 5\rightarrow 80=5x\rightarrow \frac{80}{5}=\frac{5x}{5}\rightarrow 16=x$ or $x=16$

8. $\frac{20}{25}=\frac{4}{x}\rightarrow 20\times x=25\times 4\rightarrow 20x=100\rightarrow \frac{20x}{20}=\frac{100}{20}\rightarrow x=5$

9. $\frac{15}{3}=\frac{25}{x}\rightarrow 15\times x=25\times 3\rightarrow 15x=75\rightarrow \frac{15x}{15}=\frac{75}{15}\rightarrow x=5$

10. $\frac{8}{10}=\frac{x}{7}\rightarrow 8\times 7=10\times x\rightarrow 56=10x\rightarrow \frac{56}{10}=\frac{10x}{10}\rightarrow 5.6=x$ or $x=5.6$

11. $\frac{4}{x}=\frac{5}{14}\rightarrow 4\times 14=x\times 5\rightarrow 56=5x\rightarrow \frac{56}{5}=\frac{5x}{5}\rightarrow 11.2=x$ or $x=11.2$

12. $\frac{0.2}{0.9}=\frac{3.6}{x}\rightarrow 0.2\times x=0.9\times 3.6\rightarrow 0.2x=3.24\rightarrow \frac{0.2x}{0.2}=\frac{3.24}{0.2}\rightarrow x=16.2$

13. $\frac{1.4}{x}=\frac{0.25}{7.5}\rightarrow 1.4\times 7.5=x\times 0.25\rightarrow 10.5=0.25x\rightarrow \frac{10.5}{0.25}=\frac{0.25x}{0.25}\rightarrow 42=x$ or $x=42$

14. $\dfrac{x}{\dfrac{1}{3}} = \dfrac{\dfrac{15}{9}}{2} \rightarrow x \times 2 = \dfrac{1}{3} \times \dfrac{15}{9} \rightarrow 2x = \rightarrow 2x = \dfrac{5}{9} \rightarrow \dfrac{2x}{2} = \dfrac{\dfrac{5}{9}}{2} \rightarrow x = \dfrac{5}{9} \times \dfrac{1}{2} \rightarrow x = \dfrac{5}{18}$

15. $\dfrac{2\dfrac{2}{5}}{1\dfrac{2}{3}} = \dfrac{6}{x} \rightarrow 2\dfrac{2}{5} \times x = 1\dfrac{2}{3} \times 6 \rightarrow \dfrac{12}{5}x = \dfrac{5}{3} \times \dfrac{6}{1} \rightarrow \dfrac{\dfrac{12}{5}}{\dfrac{12}{5}}x = 10 \rightarrow x = \dfrac{10}{1} \times \dfrac{5}{12} \rightarrow x = \dfrac{25}{6} \rightarrow x = 4\dfrac{1}{6}$